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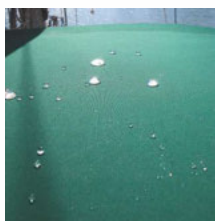


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Waiting for the tide



with the editor

To receive the editor's monthly email newsletter, sign up on our website: www.pbo.co.uk

PBO's role in a brand new world

The world of magazines is, when all's said and done, a strange one. In fact, if you were to sit in on one of the briefings held by our management, the term 'magazine' often takes some time to appear. Instead, we are 'brands'.

Being a traditionalist at heart, part of me rails against this change of name, but it's a sign of the times. Once, it was enough to produce a magazine every month. In a world dominated by paper, a magazine was one of the very few ways available for sailors to immerse themselves in their chosen sport without actually doing it, and consequently it was one of very few ways for marine advertisers to reach their market.

Today, the picture is somewhat different. Some of the magazines owned by our parent company have dramatically departed from their roots in publishing – *Decanter*, for example,

sell around 43,000 copies monthly, but you see their name now on a range of international events and awards – far more people have bought a bottle with their awards rosette on it than have ever bought the magazine!

PBO is more traditional, perhaps, and the magazine is still our main raison d'être. However, we've branched out a lot – our website, www.pbo.co.uk, now has vast amounts of content designed to inform and entertain. We're active on Facebook and Twitter, with a growing following, and our forum is one of the most lively places for sailors online.

The glass-half-empty view is that all this comes at a cost to the magazine. We're 'giving away' content which cost us money to produce, and the forums are partly populated by people who have either ceased to or never read PBO. Meanwhile, advertisers now have to spread their budget over a much wider range of media.

Compare a modern magazine with one from the 1980s and you'll see the effect.

On the other hand, being a 'brand' rather than just a magazine is in some ways liberating. The fact that a reader can pick up their smartphone, tablet or computer and find an answer through our forums is truly amazing. Like all forums, you can't guarantee that you'll get the right answer, but there's a large number of very experienced contributors offering advice swiftly and free of charge.

Meanwhile, the fact that we now have a large number of articles on a range of topics on our site has massively boosted the traffic on our site – which means that more people are aware of PBO as a 'brand'. That can only be good.

In this brave new world, that means you'll be seeing us take on rather more non-paper-related activities, mostly on the web but also at events. The first is our new venture at Beaulieu Boatjumble.

Being a 'brand' is in some ways liberating

You can find full details in our preview starting on page 75, but in short we are setting up an event titled 'Ask the Experts Live'. As the name suggests, it's based on our ever-popular Ask the Experts pages, but here we will have a range of industry experts available all day to answer any questions you might have. They will also each be giving a presentation or demonstration based on their area of expertise, so if you wondered how to get a great finish with two-pack paint, avoid spreading sealant everywhere except on the job itself, or need tips on pitfalls to avoid when considering buying a second-hand boat, this is a day not to be missed. It's all free, so that's at least one bargain you'll get at the jumble!

I hope to see you there. Meanwhile, I hope you enjoy PBO in all its forms: paper, digital, online and in person. We're more than just a magazine!

Fair winds,

David Pugh

PBO is also available on these digital platforms





Countdown for the America's Cup World Series, Portsmouth

How to watch a sailing spectacular that will make history and feature state-of-the-art boats

Tickets for the America's Cup World Series, Portsmouth are now on sale: spectators are promised a similar viewing experience to the Olympic 2012 sailing events.

The World Series racing circuit is the warm-up for the 35th America's Cup, and the teams' overall ranking positions will determine their starting points score in the big event's 2017 qualifiers. The Portsmouth event marks the first time a British America's Cup team will compete in an official America's Cup event in UK waters since 1851. This was when the prestigious trophy left British shores, and it hasn't been won by a British team since – something Ben Ainslie Racing is keen to address.

Up to 500,000 visitors are expected to attend this summer's sporting and entertainment spectacular from Thursday 23 July to Sunday 26 July to watch the world's best sailors battling it out on high-speed AC45 foiling catamarans.

This ACWS marks the first series with catamarans that will lift out of the water on hydrofoils.

There are free-to-view and paid ticket options, but all must be booked in advance.

Three ticket options

Paid tickets (priced from £20 to £45) will provide access to 'Fanzone Arena', allowing up to 5,000 people per day to enjoy prime views of the race course and access to event entertainment, including the official skipper presentation and press conference, big screens and expert commentary, plus food and drink stands.

The free-to-view 'Waterfront Festival Arena' will be located on Southsea Common, offering



Sir Ben Ainslie displays one of the 'golden tickets' that can be won

entertainment, sport, food and drink, shopping and family activities. Only pre-registered ticket holders will gain access as the capacity is 30,000 per day. All tickets are only available through www.ticketmaster.co.uk/ACWSPortsmouth

Hospitality packages (with prices from £195 to £395) are available for the 'Waterfront Pavilion' site, with the best views overlooking the racing, just 100m away. This inside balcony area will offer 'top level' food and drink, live presentations, live race action and screens, a printed event programme, chances to meet the sailors, see the America's Cup trophy and access the Fanzone Arena. See www.acwsportsmouth.com/hospitality for details.

Event itinerary

The public opening ceremony, Thursday 23 July, will feature an all-team parade of sail. Friday is practice day and the first opportunity for fans to watch the teams race on Portsmouth's

waters. The Red Arrows will perform an aerobatic display. Saturday and Sunday are official race days with entertainment on both the Southsea Common Waterfront Festival arena and inside the Fanzone Arena. All ACWS teams will set up their boats in a publicly-visible area inside Portsmouth's Historic Dockyard and Royal Navy Base.

Spectator control

The ACWS team is working closely with Hampshire Police to address any security and transport concerns. On-the-water restrictions are being managed by Queen's Harbour Master

Portsmouth – with public notifications issued three weeks before the event. There will be an exclusion area around the AC45 racing area and restrictions in the shipping channels. There will be limited space for boating spectators, but racing director Rob Andrews says: 'We believe the best way to watch is from the shore, where there will be food, commentary and toilets.'

Ben Ainslie Racing team

British supporters will be able to get behind home team Ben Ainslie Racing (BAR), who will be competing on home waters for the first time. The new BAR base is under construction in Portsmouth and the team is due to move in this May.

BAR team principal Sir Ben said: 'I've experienced the close-to-shore British crowd during the London 2012 Olympics and it pushed me that little bit harder. In July, we will be competing against the world's best America's Cup teams, and to have that home crowd supporting us will drive the team on.'

Prize draw

Any ticket purchases shared on Twitter and Facebook with #goldenticketACWSUK will be entered into a monthly competition to win 'golden ticket' prizes and upgrades.

■ www.acwsportsmouth.com



Former CEO of the McLaren Group and team principal of the McLaren F1 team, Martin Whitmarsh, is joining Ben Ainslie Racing (BAR) as chief executive officer. Whitmarsh brings to the team his engineering background and high-level experience of managing a technology company focused on top-level competition. From April, Whitmarsh will report to Ben Ainslie and the board, on which he will have a seat.

UK-wide tidal energy scheme plans unveiled

Plans for a fleet of six tidal lagoons across the UK have been unveiled by Tidal Lagoon Power.

The proposed Cardiff Tidal Lagoon would be the UK's first full-scale tidal lagoon power plant. It follows the pioneering Swansea Bay Tidal Lagoon, a scheme developed to establish a scalable blueprint for the sector and due to receive a planning decision by 10 June 2015. Tidal Lagoon Power has also confirmed that early feasibility and engagement work is under way relating to the delivery of four other full-scale UK tidal lagoons at Newport, West Cumbria, Colwyn Bay and Bridgwater Bay. Together, the national fleet of six lagoons could meet 8% of the UK's total electricity requirement for 120 years.

Plans for Tidal Lagoon Cardiff include up to 90 turbines set within a 22km breakwater that would enclose an area of around 70km² with an average tidal range of 9.21m. The western landfall would be approximately 2km from the

entrance to Cardiff Bay and the eastern landfall would be approximately 2km from the mouth of the River Usk. The lagoon has a design life of 120 years, would generate power for approximately 14 hours each day and could be powered on in 2022.

Mark Shorrock, chief executive of Tidal Lagoon Power, said: 'We have the best tidal resource in Europe and the second-best worldwide. We now have a sustainable way to make the most of this natural advantage. There is still a long way to go and many environmental surveys to undertake, but we will work in partnership with all nature conservation bodies so as to understand, avoid, minimise and mitigate any environmental impacts.'

Tidal Lagoon Power Limited expects to submit a full planning application for Tidal Lagoon Cardiff in 2017, with a decision then expected in 2018. The lagoon would take up to five years to build.



An artist's impression of the Swansea Bay Tidal Lagoon scheme

Tidal Lagoon Power have submitted an Environmental Impact Assessment scoping report for a tidal lagoon between Cardiff and Newport. The project will have an installed capacity, dependent on final design, of between 1,800MW and 2,800MW, giving a reliable annual output of 4TWh to 6TWh, comfortably enough low carbon electricity to power every home in Wales throughout its 120-year life.

The Development Consent Order (DCO) examination for the Swansea Bay tidal lagoon carried out by the Planning Inspectorate closed on 10 December 2014. The Examining Authority has a period of three months to consider and make a recommendation to the Secretary of State. The Secretary of State then has until 10 June 2015 to announce his decision.

Chief mate sentenced for fatal yacht collision



A yachtswoman was killed when Orca was struck by a 5,000-tonne dredger. **INSET** Gerardus Chapel **RIGHT** Bernadine Ingram

A chief mate of a 5,000-tonne dredger who admitted causing a devastating collision off the Suffolk coast, which killed a yachtswoman, has been given a suspended prison sentence.

On 8 June 2014 the 98m (321ft) *Shoreway*, owned by Koninklijke Boskalis Westminster NV, collided with the Moody 31 yacht *Orca* at the entrance to the River Orwell in Suffolk. Gerardus Chapel, who was *Shoreway*'s chief mate at the time, was at the helm. *Shoreway* had just finished dredging in Felixstowe and was going out to sea to dump the spoils, but for an unknown reason left the deep-water channel and headed into an area frequented by pleasure vessels.

Orca was in this area, owned by Peter and Bernadine Ingram who were out for a day-sail with their two pet collies. *Shoreway* hit *Orca* head-on and cut a large hole in the vessel's starboard side. *Orca* sank almost immediately: Mr Ingram and one of the dogs managed to

swim to the surface, but his wife and other dog were caught in the wreckage. Mrs Ingram's body was recovered by divers the following day, along with their dog.

At the time of the collision, the visibility was perfect and the weather was fine. When interviewed by Maritime and Coastguard Agency (MCA) enforcement officers, Mr Chapel admitted that he did not see the yacht, even though it was clearly visible and on radar.

Mr Chapel was sentenced to nine months, reduced to six months which has been suspended for 18 months, after pleading guilty to conduct endangering ships, structures or individuals (section 58, Merchant Shipping act 1995).

Captain Roger Towner, assistant director from the MCA's maritime safety and standards branch, said it was clearly evident that Mr Chapel had failed to keep a proper lookout by all available means, which resulted in this tragic incident. ➔

Maritime and Coastguard Agency

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Civilian SAR helicopter service launched

The launch of the civilian UK search and rescue (SAR) helicopter service was marked at a ceremony at the new SAR base at Humberside Airport.

Bristow Helicopters Ltd will operate the SAR helicopter service on behalf of HM Coastguard. The company was awarded the 10-year UK SAR contract by the Department for Transport in March 2013. It will deliver the service from 10 bases strategically located close to areas of high SAR incident rates. These bases will go live in a phased approach from April 1. The first to open will be at Humberside and Inverness. Bristow crews will deliver the SAR helicopter service with state-of-the-art helicopters, equipped with the latest technology including night vision, mission management and increased onboard medical capabilities.

The ceremony on 26 February was attended by John Hayes MP, Minister of State at the Department for Transport, Sir Alan Massey, chief executive of the MCA,



Samantha Willenbacher, director of UK SAR for Bristow Helicopters, the Rt Hon John Hayes MP, Minister of State for Transport, and Sir Alan Massey, chief executive of the Maritime and Coastguard Agency

representatives from the military and other search and rescue organisations who will work with the new service, and invited guests who have been instrumental in preparing the new service.

Mr Hayes said: 'Although I would rather everyone avoid the circumstances where a search and

rescue helicopter rescue is needed, I look forward to hearing about the professionalism and commitment that resides in all that work here and which will surely save lives.'

Sir Alan said: 'I am hugely proud that HM Coastguard has been entrusted with the SAR helicopter service. The RAF and RN have set

the bar incredibly high, and I'd like to thank them for their service and recognise the outstanding work they have done over many decades. We will take their legacy forward with the utmost pride and care.'

Samantha Willenbacher, director of UK Search and Rescue at Bristow Helicopters Ltd, said: 'We have enormous respect for the dedication that our military colleagues have demonstrated in delivering search and rescue over the past 70 years and we have always understood how vital it is that their knowledge and expertise is maintained. We have worked closely with them in preparing for the civilian service to go live and have also welcomed many of them into the new civilian SAR force.'

The UK SAR bases at Caernarfon and Kent will go live on July 1, followed by St Athan on October 1. Prestwick and Newquay will become operational on January 1, 2016 and the remaining three bases at Lee-on-Solent, Sumburgh and Stornoway will follow in 2017.

Greek TPP tax 'lawful under EU law'

The Royal Yachting Association (RYA) has received confirmation that the European Commission considers the Greek TPP tax to be lawful under EU law.

At the end of 2013 legislation was adopted by the Greek Parliament which, on implementation, will introduce a tax on boats of 7m in length or more that visit or are kept in Greek territorial waters – regardless of the boat's flag state or the nationality of the owner. As yet there has been no indication when (if at all) collection of this tax will start.

The RYA, through its membership of the European Boating Association (which

represents 1.5 million boaters across Europe and of which the RYA is a founder member), wrote to the European Commission to express concern that the tax appeared to conflict with the Commission's efforts to encourage recreational boat tourism within the EU. The RYA also sought the Commission's views on whether the tax was compatible with EU taxation laws.

The European Commission has reviewed the Greek legislation and has concluded that the tax does not contravene EU law. It remains to be seen, however, whether the recent political changes in Greece will have an impact on the



Sailing Holidays

Yachts at anchor in Greece

speed with which this legislation is implemented. In the meantime, the RYA continues to engage with the Commission in relation to its coastal tourism policy.

National coastguard volunteer drive

People living in Britain's coastal communities are being asked to get involved and make a difference by becoming Coastguard Rescue Officers.

Her Majesty's Coastguard coordinates maritime search and rescue in the UK: one resource that can be called into action at any time day or night is a Coastguard Rescue Team. There are 347 teams in the UK made up of over 3,500 volunteers, but there are currently more than 300 vacancies including

80 in the east of the country.

Head of coastal operations Charlie Ball said: 'Coastguard Rescue Officers are trained in first aid and a variety of rescue techniques, from water, mud, rope and cliff rescues to search methods and assisting helicopter operations.'

'If you'd like to join, we'll ensure you have regular training, and all we ask in return is that you are situated within 20 minutes of the Coastguard base, and be available to respond at most times.'

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Yachtswoman Florence Arthaud loses her life in tragic helicopter accident

French yachtswoman Florence Arthaud was among 10 people killed in a tragic accident in Argentina, when two helicopters collided during the filming of a TV reality show. Seven other French nationals were also killed on 9 March including swimmer Camille Muffat and boxer Alexis Vastine, along with their two Argentine helicopter pilots.

The International Sailing Federation (ISAF) has paid tribute to Florence as one of France's greatest yachtswomen, who charmed the public when she won the 1990 Route du Rhum, the solo transatlantic race between France and Guadeloupe. At the age of 33, Arthaud completed the prestigious transatlantic solo race in 14 days, 10 hours and 10 minutes on board the trimaran *Pierre 1*. En route, the autopilot and radio failed, and she suffered a hernia: but the victory earned Florence the accolade of 'Champion of Champions' by the



Florence Arthaud was killed during the filming of a TV reality show

newspaper *L'Equipe*.

Florence Arthaud had sailed with many legendary French sailors such as Bruno Peyron and raced double-handed with Barcelona World Race competitor Jean Le Cam, together taking second place in the Transat AG2R in 1996. In recent years she could still be

found passionately supporting ocean sailors on the pontoons.

The Royal Yachting Association (RYA) has expressed its deepest sympathies to the Fédération Française de Voile, the family and friends of Ms Arthaud and the other victims of this terrible accident.

ISA reports on fuel supplies issue

The Irish Sailing Association (ISA) has made a first submission to the Revenue on the current issue of fuel supplies. It follows the European Commission decision to refer Ireland to the European Court over the continued use of marked diesel by leisure craft. At present there is no indication of when the case might be heard.

The ISA has researched the current and possible future situation in respect of fuel availability for leisure vessels and prepared a full report, which highlights that the issue for leisure sailors is not the price of diesel but its availability.

A spokesman said: 'Only a minority of leisure craft in Ireland are kept in marinas, and fewer than half the marinas in Ireland have fuelling facilities.'

In the event of enforced use of

white diesel only, the ISA says some (but not all) marinas that have diesel pumps would switch them from green to white. This would result in just 10 locations on the coast with harbourside fuel availability for leisure craft. Other key fuelling facilities such as at Baltimore (Co Cork) would be closed to leisure craft.

The ISA says:

■ White diesel in tankers would be available only from selected major suppliers, in minimum order quantities which are impracticably large and with long order lead times. Carrying fuel from filling stations in cans would be the only remaining option.

■ Setting up new harbourside fuelling facilities specifically for leisure craft is not economically viable as a business proposition.

■ Undue restrictions would be placed on the freedom of

leisure sailors to travel.

■ Leisure vessels would go to sea either overburdened with spare cans of fuel, or with insufficient reserves on board. Distress situations would arise and lives would be at risk.

For the foreseeable future, the present arrangements apply. The ISA spokesman said: 'We are free to keep using green diesel, but are required to pay the additional duty (currently 37 cents a litre) to the Revenue by March 1 of the following year. The forms are on www.revenue.ie/en/tax/excise/leaflets/index.html, under 'Private pleasure navigation'.

DIARY DATES

■ **Craignish Boat Jumble**, 28 March. Opens 10am. Craignish Village Hall, Ardfert, Lochgilphead, Argyll. Admission £3.50, accompanied children and car park free.

■ **Fish & Ships**, Portland Marina, 11-12 April, boat and food festival, www.deanreddyhoff.co.uk

■ **Norfolk Boat Jumble**, 12 April, opens 10am. Royal Norfolk Show Ground, Norwich.

■ **Irish Boat Jumble**, 12 April, opens 10am, Carrickfergus Sailing Club, County Antrim. Admission €5. Accompanied children and car park free, www.irishboatjumble.org

■ **The third East Coast Boat Show**, 25-26 April, hosted by Shotley Marina. Free entry and parking, www.shotleymarina.com/boatshow

■ **Beaulieu Boatjumble**, 26 April, featuring PBO Ask the Experts Live. Admission from 9am for Boatmall and Boatmart and 10am for Boatjumble, www.beaulieubojumble.co.uk

■ **Horning Boat Show**, 2 May, Norfolk Broads, 10am-5pm, www.horningboatshow.co.uk

■ **West of Scotland Boat Jumble**, 3 May, opens 10am, Scottish Maritime Museum, Irvine Harbourside, Irvine. Admission £4. Accompanied children and car parking free.

■ **Poole Harbour Boat Show**, 9-10 May, organised and operated by Poole Harbour Commissioners (PHC). Free event on Poole Quay and at Poole Quay Boat Haven, www.pooleharbourboatshow.co.uk

■ **RYA Push The Boat Out**, 9-17 May, www.rya.org.uk/programmes/pushtheboatout

■ **Hamble Boat Show**, 16-17 May, Hamble Point Marina, Hamble, Southampton, www.hamblepointboatshow.co.uk

■ **Anstruther Harbour Festival**, 29 to 31 May, www.anstrutherharbourfestival.co.uk

Send us your diary dates to pbo@timeinc.com. See more online at www.pbo.co.uk

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SOUTH

BREAKWATER EXPLOSIVE DEVICE ALERT

An explosive device was discovered amongst shingle on the new Cowes breakwater. The discovery of the Second World War anti-aircraft shell was made by contractors carrying out reshaping work. They immediately surrounded the item with sandbags and raised the alarm. Cowes lifeboat was launched on 26 February and transported mobile coastguards from Bembridge to carry out an on-the-spot inspection. A controlled explosion of the shell was carried out the following day by Royal Navy bomb disposal experts.



The device discovered amongst shingle on the new Cowes breakwater

LIFERAFT CHALLENGE

Former soldier Wayne Ingram will be spending seven days and nights in the confines of a liferaft. The charity challenge and scientific experiment will be held from 18-25 May at Portland Marina, Dorset.

Wayne says: 'This is a twofold exercise, firstly to raise money for Great Ormond Street Hospital

families centre, and secondly to allow Professor Mike Tipton and his team at Plymouth University conduct experiments on me.'

He added: 'I will only have a small grab bag, allowing me to take a small amount of clothing and only one day's food and water, so forcing me to survive the remainder. The information my body generates before, during and after will allow Professor Tipton's team to understand how one copes in a survival situation.'

■ www.wayneingram.com

SWANWICK BOATYARD

A new £5.8million boatyard development at Swanwick Marina will be celebrated with an opening ceremony on Easter Monday, 6 April, between 2pm-7pm. A plaque will be unveiled to mark the occasion. Entertainment will include gymnastic tumbling, aerial silk dancers, live music, a charity raffle and a hog roast for berth-holders. Onsite brokers will exhibit new and used boats, while the boatyard's marine businesses will showcase products and services.

CHANNEL ISLANDS

WINTER WINDS

Huge tides in Guernsey at the end of February reached the St Peter Port HAT mark of 10.3m – 1m higher than MHWS. Coupled with gale-force winds, the island's sea defences were put to test. Water came over the Victoria Marina wall and flooded the quay in St Peter Port, preventing traffic from passing through. On the west coast, the recently fortified sea wall in Perelle harbour was breached and part of the main slipway collapsed. Further down the coast at L'Eree, a massive protective shingle bank was breached, resulting in floods and road closures.



Huge tides at the end of February put Guernsey's sea defences to the test

SOUTH-WEST

FOWEY FACILITIES

Construction of new dry boat storage facilities in Fowey is expected to be completed by Easter. The £150,000 project includes a new building with space for up to 20 boats as well as a workshop and a chandlery, and a boat hoist capable of lifting up to 15 tonnes. Extra storage facilities may be added if there is sufficient demand.

WALES

NATIONAL NETWORK

Milford Haven Coastguard Operations Centre (CGOC) joined the Coastguard national network on 6 March and

started taking on operations from Swansea Coastguard. Work has been carried out at the centre to upgrade the technology and introduce new systems. The changes to Her Majesty's Coastguard will result in the National Maritime Operations Centre (NMOC) and 10 other CGOCs around the UK operating as an integrated network.

MILFORD MASTER PLAN

The Port of Milford Haven's £70million Master Plan for Milford Dock has been granted outline planning permission by Pembrokeshire County Council. The council's planning committee voted unanimously in favour of the development. Work is also progressing in other areas. Jeff Teague, estates director for the port, said: 'On the marina side, the new £6million lock gates will soon be launched in readiness for this year's boating season.'

IRELAND

IRISH BOAT JUMBLE

For the second year running, Carrickfergus Sailing Club is hosting the Irish Boat Jumble. It takes place on Sunday 12 April, and gates open at 10am. The entry fee is £4 (€5), although under-16s go free when accompanied by an adult. Proceeds

will go towards the building fund for the replacement clubhouse following the devastating fire in June 2012.

SCOTLAND

STRICKEN CARGO SHIP

The general cargo vessel *Lysblink Seaways* ran aground near Kilchoan in the western entrance to the Sound of Mull in the early hours of 18 February. Four days later, high winds caused the vessel to drag her anchor and, as per the Maritime and Coastguard Agency's contingency plan, *Lysblink Seaways* was towed back out to sea. On 25 February, the stricken ship was towed to Scallastle Bay ahead of forecast bad weather, following a minor oil leak and a ship-to-ship transfer of 153 tons of fuel. On 4 March, *Lysblink Seaways* was towed 150NM to Inchgreen, Greenock on the Firth of Clyde for repairs. The operation was monitored by the Scottish Environment Group.

NAVIGATION CLOSURE

Unusually high water levels on Loch Oich have partially washed Cullochry Weir away, causing a major breach of the canal embankment around six miles south of Fort Augustus. The Caledonian Canal, due to open for the season on 23 March, could be closed to sea navigation until the end of April. Repairs are estimated to cost between £200,000 and £300,000. While there is no risk to life or property, there has been an impact on the flow of water between the canal and the local loch system. Loch Oich, which usually sits at an average depth of 1.2m, was at 0.4m at the time of going to press. Keep up to date at <http://bit.ly/cullochrybreach>

NORTH-EAST

WIND FARM CONSENT

Planning consent has been granted for the largest offshore wind farm in the world, Dogger Bank Creyke Beck, to be developed in the North Sea off the Yorkshire coast. It follows more than £60million-worth of surveys and four years of assessments, stakeholder consultation and planning by the Forewind consortium, owned by the RWE, SSE, Statkraft and Statoil energy companies. Dogger Bank Creyke Beck comprises two separate 1.2GW offshore wind farms, each with up to 200 turbines installed across an area of around 500km². The wind farms will be 131km from the coast and will connect into the existing Creyke Beck substation near Cottingham.

NORTH WEST



HM Coastguard Fleetwood

MOTOR CRUISER BLAZE

A fire that destroyed a motor cruiser at Fleetwood Haven Marina in Lancashire was 'most likely started by an electrical fault near the sleeping quarters', an investigation has found. The Fleetwood Coastguard team were alerted on 15 February and found Lancashire Fire and Rescue Service firefighters already tackling the fire. The boat had 700lt of fuel and a gas tank on board. Due to the boat's location, tied to a pontoon in the middle of the dock, the fire service declared a major incident, requiring seven fire appliances and a mobile control room. Firefighters used thermal imaging cameras to check the fire was fully extinguished, and the severely damaged boat was then towed into the dry dock.

EAST

HARBOUR BOOST

Following repairs to the dock wall, new services were introduced at Southwold Harbour to enhance its appeal as a tourist destination. The £3.5million project was funded by Waveney District Council, with a £1.2million contribution from the European Fisheries Fund. The harbour now offers both white and red diesel, a fishing compound with a freezer and lockable storage, a lifting crane, new pontoon moorings with electricity for use by leisure craft, plus new shower and toilet facilities.

EAST COAST BOAT SHOW

The third East Coast Boat Show, hosted by Shotley Marina, will be held on 25 and 26 April. The show gives a chance to meet experts showing new boats ranging from 5.8m (19ft) RIBs to 16.4m (54ft) sailing yachts. Brands

include Spirit Yachts, Beneteau, Jeanneau, Broom Boats, Hardy Boats, Bavaria, Hanse, Dufour, Oyster and Elan. Free entry and parking.

SOUTH-EAST

FAN HEATER FIRE

Boat owners are being warned not to leave fan heaters unattended following a fire at central London's St Katharine Docks marina. Fire crews were called after smoke started billowing from a 16.4m (54ft) motor yacht on 9 March, and had the blaze under control after an hour. The interior of the middle deck of the 10-tonne Edership President 54S sustained severe smoke damage. William Bowman, marina director for St Katharine Docks, said the cause of the incident was 'a fan heater, which burnt out, having been left on a timer.'

TUG BOAT OWNER JAILED

A tug boat owner has been jailed for

eight months after his crew member died trying to reattach a tow line in a storm. Martin Richley, owner and skipper of the 9.5m (31ft) Medway tug boat *Endurance*, pleaded guilty at Southampton Crown Court to serious offences under the Merchant Shipping Act. On 3 February 2013 *Endurance* began to tow the 18m (60ft) motor cruiser *Sirus M* from the River Medway to Brighton. Mr Richley was warned by Medway Vessel Traffic Monitoring Station that Force 8 winds had been forecast but continued despite not being qualified to carry out this passage and his tug only being licenced for use in 'favourable' weather conditions. Just before midnight on 4 February 2013, in gale-force winds near Beachy Head, the tow line snapped, and while trying to reattach the vessels, crewman Steven Trice fell overboard and was lost despite a search by Newhaven and Eastbourne lifeboats. His body was recovered several weeks later.

INLAND

WINDERMERE FUEL FEARS

Bowness Bay Marina on Lake Windermere is to stop selling fuel once the present stock of petrol and diesel is exhausted. The company says the pumps are past their sell-by date, and it is also uneconomic to replace the ageing fuel tanks which were installed more than 40 years ago. Boat owners have raised concerns that the decision will lead some people to head for the centre of the lake to fuel their boats from cans, with an attendant risk of spillage.

UNLAWFUL MOORING BAN

Richmond Council has been authorised to prosecute unlawfully moored boats. The byelaw means that if any boats moor up to land owned or managed by the council it will be a criminal offence which could carry a fine and/or prison sentence. Every 24 hours the boat is moored or attached to the land, a new crime has been committed.



PRACTICAL

Engine investigations

■ We examine the charging system on *Hantu Biru*'s engine and make a jig to position the engine bearers

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English Harbour 27

■ Taking the helm of this 27ft cruiser

SEAMANSHIP

Getting the best from gaff

■ Efficient sailing with a gaff rig

Crotch straps

■ New RNLI research revealed

CRUISING

Ramsgate

■ A Kent town with maritime heritage

Exploring Solent creeks

■ Meanders in a gentleman's launch

PLUS

Fairey Fisherman motor-sailer – on the water in an adapted ship's lifeboat

**JUNE ISSUE ON SALE
THURSDAY APRIL 23**

Contents subject to change



Bargains of the month...

More great bargains in the Chandlery section starting on page 58

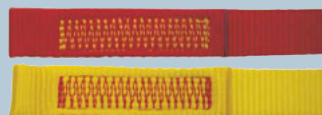
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Readers share their thoughts and opinions

SUGGESTIONS FOR MINIMISING CORROSION OF ANODES

A note on anodes

■ Re 'Anode is fizzing away' (Ask the experts PBO March), I have had a three-bladed folding prop fitted to my Volvo 2030 saildrive for the last 12 years and have found that the anodes will last for 9-10 months most of the time, but this can be very variable. To minimise the loss, the following may help.

Firstly, if you are in a marina, choose your neighbours carefully. The boats around my berth usually do not change, but one year a different boat appeared for two months, and during that time newly-fitted anodes eroded away by about 80%. Fortunately the boat was moved on, and the anode depletion went back to normal. I can only surmise that this boat was shedding a lot of stray currents into the water, causing excessive galvanic action.

Secondly, only plug into marina

electrics if you need to. Apart from the initial recharging of batteries after plugging in, for most of us the electrical requirements will be minimal, but the boat is still connected to the mains and potentially to every other boat on the same circuit. If the batteries are fully charged on your return to the marina and you are not going to be away for more than a week or two, there is no need for shore power.

Thirdly, consider painting the prop but not the anodes. I have always just cleaned up the prop each year and left it bare, but I decided to antifoul it in 2014. I used a system consisting of an undercoat which is a self-etching epoxy primer and an antifouling top coat. When I lifted the boat eight months later, the anodes were less than 25% eroded – usually it would have been 50% after that amount of time. As no other factors have changed I can only think the primer coat must have electrically isolated

the prop from the water, drastically reducing the exposed surface area and therefore the load on the anodes.

I have not installed a galvanic isolator and the electrical system is standard fit. If painting the prop means the anodes will now last 12 months or more this will save £35 for each replacement set, plus the lift-out charge every six months.

Andrew Spruell
Hampshire

Colin Brown replies:

I wouldn't argue with any of that advice. Using 240V power on boats in marinas is a minefield, and faults on the pontoon supply, your own boat and other boats can all cause problems of safety as well as corrosion. The risks and the solutions are well covered in the PBO book Electrics Afloat by Alastair Garrod.

Alarm call

■ I have a charcoal heater in my boat's saloon, and even though I burn restaurant-grade charcoal as the pieces are bigger, a small amount of soot is still produced. The chimney and flue are 25mm in diameter and the chimney is in three sections. All parts screw together and provide a gas-tight fit. We have had periods of very cold, calm weather in the last few weeks: when there is wind this helps to draw the fire and keeps it burning.

I awoke recently to the sound of my CO alarm in the early hours: I felt awful, and on checking the heater found it was only

smouldering, and the smell in the saloon was bad. On deck, I unscrewed the chimney and found it was 90% blocked with soot: this was causing a back pressure in the heater and gas was leaking from the heater into the cabin.

I cleaned both sections of the flue/chimney, screwed it all back together and agitated the charcoal, and it started to draw properly.

At the deck fitting/chimney interface you have hot gas meeting very cold pipework, so any combustion products in the gas solidify and can really build up over a couple of days, blocking the pipework. The moral of the story is

that if I hadn't fitted a CO alarm I might not have been able to write this: it is only now that I am starting to feel half-decent again. So if you have a caravan, camper van or boat with a gas cooker and/or gas heater, fit an alarm. Previously, I had cleaned the chimney once a week, but I check it every day now.

David Beaver
Torpoint Yacht Harbour

Ford focused

■ I was wondering if any PBO readers have any idea what make and model of boat this is? It has a 1.8lt Ford diesel engine.

M Maher
Jarrow, Tyne and Wear



Can any readers identify this Ford-engined boat?

Brake with tradition?

■ Re your project boat article 'Servicing trailer hubs' (PBO March), I would like to add a note of caution about refurbishing brake shoes. Old brake linings often included asbestos, which was only prohibited in 1999 (pre-1973 vehicles, meanwhile, could be fitted with brake shoes containing asbestos until 2004). Given that Hantu Biru's trailer could have brake shoes from before this date, a warning should be added that brakes should be cleaned according to HSE guidelines (see www.hse.gov.uk/mvtr/mechanical-repair/asbestos.htm) and new shoes fitted.

Keep up the good work.

Nigel Fernig
Lady Saye, Conyer Marine

PEYTON'S PICK FROM THE PAST



'Yes, I feel a little guilty too, leaving without paying. But what can one do?'

Taken from Practical Boat Owner July 1994

YACHT LAUNCHED AT ROSNEATH

Special Equipment

Some pieces of equipment, evolved by the owner's family, have been fitted aboard the 37-ton motor yacht, the Jacqmarie, which was launched yesterday from the Rosneath yard of James A. Silver, Ltd., for Mr John M. Jackson, Larkhall. A solenium photo-electric cell brings a relay circuit into operation when darkness falls and switches on the vessel's riding light fitted on the deckhouse roof; wardrobe and locker doors are held shut by permanent magnets, and high-tensile phosphor-bronze ribbon is used on ship-type davits for hoisting inboard a 12ft sailing dinghy.

The Jacqmarie, which was designed by Mr John Bain, is 57ft. overall, with a beam of 14ft. 6in., and is driven at a speed of 10 knots by twin Gray petrol engines, each

Sensory perception

■ Re the letters about anchor light sensors (PBO April), readers might be interested in this newspaper cutting from 1950: my grandfather's yacht was fitted with light sensors 65 years ago. The yacht was clearly well ahead of her time!

Ian Marsh, Kettering



An Archambault Surprise in light airs on Lake Geneva

No Surprises there, then...

■ As a long-term PBO subscriber I'm always on the lookout for articles about one of my favourite boats, but it rarely gets a mention despite being hugely popular on the continent. My hopes were raised when I saw Peter K Poland's article on 24-27ft French family cruisers (PBO Feb), but sadly these hopes were dashed – there was no mention of the 7.6m (25ft) Archambault Surprise. These boats are still in production after nearly 40 years, with the best part of 2,000 built. The huge numbers testify to the success of the package, so it's a mystery why it hasn't been more popular in the UK. Here in Switzerland it is heralded as a moderately-priced boat that can switch effortlessly from a day or weekend cruiser into a One Design racer with big competitive fleets.

Mark Williams, Geneva, Switzerland



Good as gold

■ While marina charges in the UK often make the eyes water, the mooring bollards at the marina in Costa Calero, Lanzarote are of gold standard and polished every day. This is a great place for a final stop before crossing the Atlantic.

**Loris Goring
Brixham**

Dipsticks: going against the grain

■ Re 'Dipsticks and sight tubes' (Sketchbook, PBO March), one of the dipsticks recommended as the simplest was a piece of light-coloured wood. I agree, but there could be problems ahead. I remember cruising with a friend in his Phillipa 27 when the engine stopped for no apparent reason. We soon found that the carburettor float chamber was blocked with a fibrous deposit, fine enough to pass through the fuel filter but dense enough to block the carburettor

jets. Via a process of elimination we discovered that this deposit came from the wood dipstick (which wasn't permanently immersed in the fuel). It was made from a piece of softwood, possibly cedar, with a hard and soft grain: the soft grain had eroded in the fuel, leaving swollen particles in the fuel tank. I would therefore be careful which wood is used, suggesting that a hardwood would be better than soft.

**Graham M Richmond
Maldon, Essex**

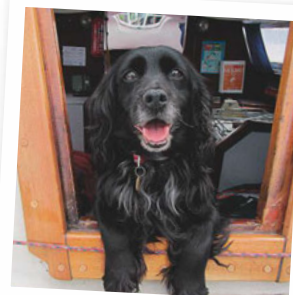
Getting it into their skulls

■ Re Flotsam and Jetsam (PBO April), Sam Llewellyn is being mildly facetious with his remarks on what to do in calm weather, suggesting that sculling is for kids in small boats, or the French. In the 1970s, very few French yachts had engines due to an exorbitant tax. It was not uncommon to see a yacht of 30ft or so being sculled (very effectively) in a variety of weathers, with a long oar over the stern, while entering or leaving harbour.

The lack of power did not deter Frenchmen from sailing in those days, and one may speculate that the difficulties they faced have given rise to the excellent sailing skills exhibited today and the pride they take in them. Last summer we stood on Tresco looking down on New Grimsby Sound in fine weather, and watched half a dozen boats come in and anchor. Most were British, and all save the last were under power. The last one tacked slowly up the sound between Bryher and Tresco, rounded up head to wind and anchored in a good position with enough space to swing. The ensign? French of course!

**Peter Kersey
Tavistock, Devon**

SEADOG OF THE MONTH



This is Maudie, our 11-year-old cocker spaniel, on board our Galion 22 in Cardiff Bay. It's fair to say that she is a reluctant sailor, but as you can see, she is happy as long as she is with us!

Dave Treharne

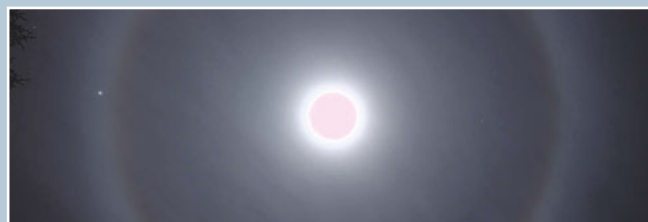
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PBO PUZZLE 188



You're at sea on a night passage with a full moon. There's a halo around it, caused by the light being refracted through the ice crystals of cirrostratus clouds.

What does this mean, and which of the following might you be able to expect in this situation?

1. An approaching front. 2. Precipitation. 3. Spring tides.
4. Veering wind. 5. Backing wind. 6. Colder weather.

■ Find the solution at the bottom of page 114



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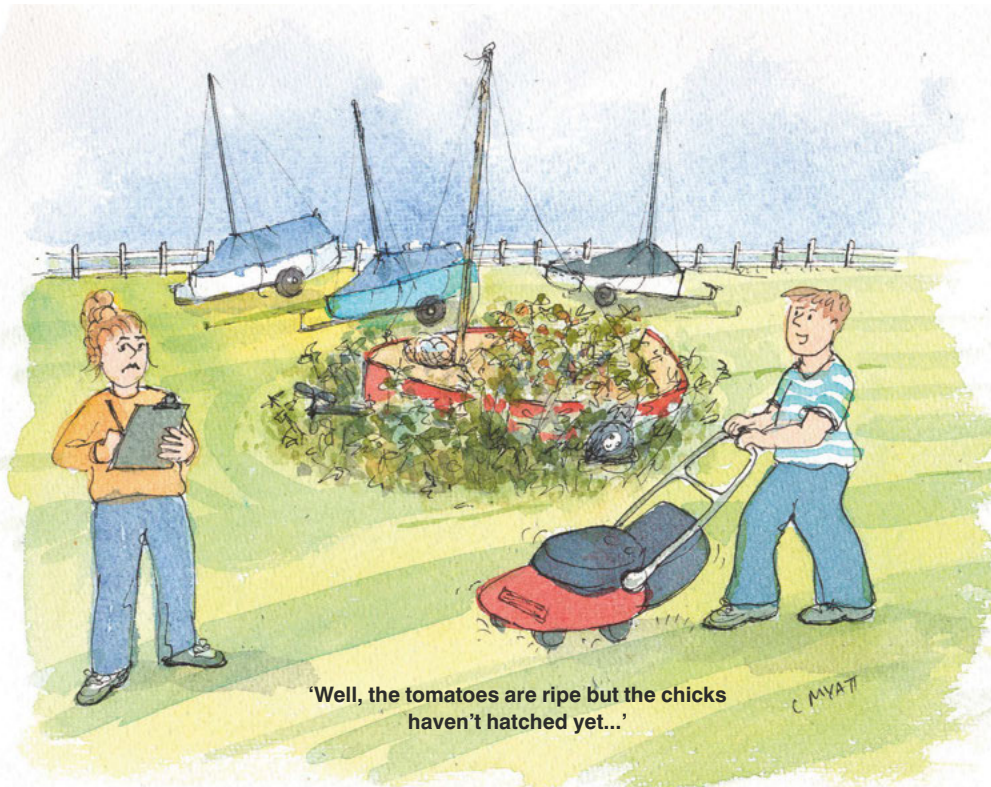




Dave Selby

Mad about the boat

Dave Selby is the proud owner of a 5.48m (18ft) Sailfish, which he keeps on a swinging mooring on the picturesque Blackwater estuary in Essex



'Well, the tomatoes are ripe but the chicks haven't hatched yet...'

C. MYATT

replace them. It was only after we'd removed the complex web of lashings, rope and strapping, peeled back the frayed tarps and bailed out the boats that we discovered another security measure. If the trailer wheels weren't seized or flat, they'd been removed for safekeeping to their owners' garden sheds.

After each exhumation we had a cup of tea and held an inquest to name each fugitive, form a posse and elect a lynch mob. It was satisfying work, and by the end of it we'd bonded into a band of cut-throat, bloodthirsty vigilantes and sat down with a cuppa to draw up a hit list and discuss how to make a noose.

Concrete bunny

When we looked up we noticed the club and grounds had been transformed. The lawn was mown, the clubhouse had been pressure-washed, benches painted and even the concrete bunny in the flowerbed in an old dinghy had received a fresh lick of paint. And Commodore Pat and her galley team had prepared a feast for all the volunteers. The only thing that let the place down was my Sailfish, her winter cover shredded, the cockpit full of water and one trailer tyre flat. It was a race against time to sort my boat before the angry mob scoffed all the sandwiches and learned how to make a noose.

As the pack closed in around me I feared the worst, but it was even worse than that. There was no noose, but one leaned threateningly on a vicious hoe, another wielded an evil sickle. I was about to ask if they would at least put a sack over my head before despatching me when Pat stepped forward, grasping a concrete bunny by the ears like a mediaeval mace, and said: 'Dave, your Sailfish has a great cockpit.' She paused, as if to broach an unspeakable subject, then added: 'I think we can win Maldon in Bloom this year if you let us plant it up.'

PBO

Practical projects and PG Tips

A yacht club work day provides an opportunity to drink limitless cups of tea while converting a Sailfish into an ornamental planter

No event brings people together better than the annual sailing club work day... except for that AGM every five years where some meddlesome moderniser proposes to increase bar prices.

These are days to stand up and be counted. And there I was too, feeling none too bright on a crisp Sunday in March at the brutal hour of 10 o'clock... in the morning! That was a revelation in itself, cos not only were the grounds teeming with volunteers, I never realised it got light that early on a Sunday.

That called for a cup of tea, so we divided into two teams – tea makers and tea drinkers – and tackled the main job of the day: noting the names of those who hadn't turned up. Over the years I've heard all manner of lame excuses, such as a clash with a golden wedding anniversary. Frankly, it just doesn't wash.

They should have thought about that 50 years ago. Don't these lightweights understand the meaning of the word 'commitment'? Fortunately, Maldon Yacht Club has a really great bunch of committed members, although reporting restrictions apply.

The work day is also a great opportunity to show your managerial prowess, and like any other sailing club MYC is full of natural born leaders. I too fancied myself suited to something in an executive capacity, but when gang master Pauline politely explained that wasn't going to happen I had a cup of tea and then asked for something involving goggles and ear defenders. I even offered to wear a reflective tabard, but the idea of me in control of a power tool was rejected on the grounds of the health and safety of everyone else in the grounds.

After another cup of tea I was getting desperate and asked if I

could go to the loo. That was a breakthrough, cos it was the first time that morning I'd been trusted to do anything by myself. My self-esteem soared until, after further exploration of my unique skill set, someone suggested breaking rocks. Fortunately, no one could find the club nail clippers.

Finally I was assigned to 'death row', which turned out to be the best job of all. Death row is that section of the dinghy park where members who haven't been seen for years – or 'absconders' – abandon their boats and tenders once they've loaded them with the contents of their garden shed, then fill them with water.

The problem was that many of the dinghy plots had expanded as part of a creeping land grab by homesteaders who fancied an allotment with a sea view. Our task was to move the dinghies, hack back the undergrowth, re-home the rare species, mark off the plots and

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Sam Llewellyn

Flotsam and jetsam

Sam Llewellyn is editor of *The Marine Quarterly*, www.marinequarterly.com, and author of nautical thrillers. Three years ago he bought a Coribee on eBay

Revision for lateen scholars

In Kerala, we were all in the same boat with regard to sailing expertise

I am in the boat in the big shed where it lives during the winter. The principal works are done. I am sitting in the saloon with a cup of tea, planning the refreshment of the varnish and some new antifouling. This does not occupy the mind for long, and it tends to drift off elsewhere.

Today it went back to Kerala, the part of south-west India whose jungles gaze out over long yellow beaches at the blue Indian Ocean. I had been paddling a canoe in the backwaters behind the beach, watching the eagles, when some men came in from fishing. Their boat was made of four rough-hewn logs, two for the bottom and one for each gunwale, giving it a beam of about 18in. A bipod mast in the bow supported an enormous lateen sail made out of a plastic tarpaulin.

I went and talked to the fishermen. They asked in broken English if I wanted to come for a sail. I said I did, and waded into the milk-warm water, and hopped in and sat down. One of the men shoved a wide sliver of bamboo into the crack between the two logs that made up the bottom. Another of them hauled in the mainsheet. The huge sail filled with a crack, the nose dug into a breaker, sluicing water aft, and we were hissing away on a broad reach, heading for the horizon.

We were going like a train, which was hardly surprising with a waterline length of about 20ft, a beam of 18in and a sail area of about 200sq ft. I was doing my best to trim the boat. Immediately behind me a

man with a scowl was levering the back end of the boat to and fro with another sliver of bamboo. One of the crew asked me if I wanted to have a go at steering. I grinned insincerely. The land was already sinking into the horizon.

This was not a machine for log-boat beginners. It would be a long swim home. I was trying to think of an excuse when the helmsman burst into a torrent of Malayalam, signifying that if anyone thought he was going to drown because some bleeding tourist did not know how to steer he had another think coming. We sailed on, all of us much relieved.

The land continued to drop.

The swell was big and oceanic now. It had occurred to me that on a broad reach like this, we were going to have to tack back to the shore. I had been assuming that the boys in the boat knew what they were doing. But as we swooshed up a swell, I looked round at the faces, which were looking back at me, and I realised that it was them who thought I knew what I was doing. So none of us knew what we were doing. 'Home, James,' I said, using the universal language of self-preservation.

The helmsman shoved his bamboo away from him and pointed the nose as close to the wind as it would go. The crew

land, three or four miles to leeward of where we had started. We put in a couple of tacks but made very little ground, because tacking a big lateen is a slow business, involving pulling the whole sail round the front of the yard, producing a short episode of sternway and some heart-stopping instability, followed by even more leeway. So the sail came down in a billowing heap, and bits of bamboo were issued to the ship's company, and we all started to paddle.

The trouble was that everyone paddled at a different speed from everyone else. I therefore started to sing. And after a couple of choruses, everyone was paddling in time, singing along to the

I looked round and realised that it was them who thought I knew what I was doing


stuck a few more bits of bamboo between the logs, hoping, I presumed, to stop us slithering down to leeward. We hiked furiously to windward. White water hissed from the lumpy bow, and the sail bulged back as the helmsman luffed to keep us upright. Very slowly, the land came up.

But it was the wrong bit of

Kerala Boat Song:

*Speed bonny boat like a bird
on the um
Over the seas to Kovalam.*

The song mixed oddly with the Vedic chants of the men hauling seine nets on the beach. But it got us there.

In the boat in the shed, the tea is cold in the cup. It is time for a bit of varnishing. 



A boat with a lateen sail. The enormous lateen on the log boat in Kerala was made from a plastic tarpaulin

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Andrew Simpson

Monthly musings

Yacht surveyor and designer Andrew Simpson cruises with his wife Chele in his own-design 11.9m (39ft) yacht *Shindig*. Read his blog at www.offshore-sailor.com



RYA Sea Survival course participants receive 'a brief glimpse of how dreadful it would be to abandon the comfort of a boat in favour of an inflatable rubber ring'

Leave the raft till last

A sea survival course reinforces a determination to delay taking to the liferaft until no other options present themselves

It's part of the vanity of human nature to attribute good ideas to oneself, but I think I can safely lay claim to the tea bag test. It involves throwing a tea bag into the sea when at anchor and watching to see if a brown stain spreads outwards from it. If it does, I reason, the water is warm enough to swim in.

I mention this because in my general determination to spread the word I recently attended an RYA Sea Survival course – not as a participant, I hasten to say, but purely as an observer. Nothing heroic, you understand, though it was not as if the conditions were in the least bit challenging. Although it was mid-November, and with the damper aspects of the course held in an open-air swimming pool, I should ease any anxieties by mentioning that the mid-November in

question was in Lanzarote, where the sun shines gloriously and the daytime temperature hangs typically around the low-to-mid 20s Centigrade.

The morning started in a classroom with a short video and the instructor describing the basic tricks of survival. Reviewed were the various items of gear packed inside the raft, what each was for and how to use it. This included such objects as heliographs, the safest way to use flares and other ways of attracting attention – all very useful. The participants were also asked to suggest items for a 'grab bag' that they would prepare themselves in anticipation of such emergencies. A pack of cards was one.

Then the topics moved on to the more social aspects: fun things like countering hypothermia and heatstroke, conservation and rationing of

supplies, operation of flares, ditto EPIRBS, even calls of nature and how to satisfy them without too much loss of dignity. The ladies looked particularly uneasy at this last, but it was handled with appropriate delicacy. All in all it was a cosy exchange, and by the time we broke for lunch the atmosphere had settled into one of quiet satisfaction.

Taking stock

The afternoon saw us out in the sunshine. The candidates were off to the changing rooms to slip into swimwear, giving me the chance to take stock. Since the pool was unheated it didn't need a tea bag to tell me that the water was still below the comfort threshold. Not that I needed to know, for I have always been of the belief that water is a liquid on which to go sailing, and that personal immersion was generally to be

avoided. So while the others splashed about I could draw reassurance from the knowledge that the yacht club bar with its coffee machine was a mere score of paces distant. Indeed, if it wasn't for the need to take photos, I could recline on a lounge and watch the antics from there.

And antics there were. The launching, inflating and righting of the two rafts proved a struggle – even in those relatively tranquil surroundings. What it must be like in a gale is beyond imagining. All of which tends to give one a different perspective. The four-person raft sat in its cradle on *Shindig's* stern has taken on an almost idol-like role, calm and reassuring – our friend and back-up when things go badly wrong. We almost venerate it, religiously submitting it to its scheduled services, of course, and introducing anyone who sails with us to its customs and workings. This reassures, invoking images of daintily stepping from boat to raft as if boarding a punt at Henley Regatta. But, as those younger and considerably fitter candidates discovered, the reality could be somewhat tougher.

I believe all sailors should attend this course – if only to get a brief glimpse of how dreadful it would be to abandon the comfort of a boat in favour of an inflatable rubber ring. The realisation should strengthen everybody's determination to avoid such a happening at all costs and remind yourself of the old saying that (with the notable exception of escaping onboard fires) you should delay taking to the liferaft until there is absolutely no alternative.

Fortunately, satellite communications has made the chance of an early rescue more likely, but even a few hours would be a misery. That's a four-person raft in the photo above, and they are struggling to fit in a fifth.

Comfort? Forget it. Boredom? Well, you could always have a game of cards.





Case study

Westerly Oceanranger 38

Boat name	Maaleesh
Location	Inverclyde
Treatment	Coppercoat® anti-foul applied 1996
Photo	October 2013 with owner
Verdict	The original treatment lasted 17 years. In 2014, Maaleesh was treated with Coppercoat® anti-foul for the second time.



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14 often-forgotten boat jobs

It's all too easy to overlook some worthwhile boat jobs when rushing towards the start of the sailing season. Ben Meakins issues a timely reminder

The daffodils are nosing their way out of the ground and the days are lengthening – spring is on its way! But there's still a month or so until most boats head for

the water, and time to sort out the common problems which often rear their heads. Here are some jobs which are often forgotten in the rush to get the boat back afloat, but which there's still plenty of

time to do on those dark evenings and short weekends before the pressure really builds up. They should also lead to noticeable improvements in your sailing this season!



1 Check for deck leaks

Run a hose over your windows, hatches, and deck fittings, ideally with someone stationed down below, to check for leaks. It's much easier to fix them with the boat ashore. If you're unsure where the water is coming in, a light dusting of baby powder over the surfaces will show the tracks of any drips or leaks.

2 Re-varnishing tips and tricks

It's worth using the time while the boat is out the water to varnish any woodwork you can take off the boat and give it as long as possible for the solvents to evaporate before the boat goes back in. Here are some tips for a good finish:

- Don't varnish direct from the tin – decant enough for the job into a clean container and store the tin in a dust-free area.
- Use a tack cloth to wipe down the item being varnished before varnishing. After use, store the tack cloth in an airtight container.
- Warm the varnish container in a bowl of warm water to assist the flow.
- If varnishing teak, purge the surface oil with acetone before varnishing to help the varnish adhere.
- De-dust the area you'll be varnishing in, including shelves, floors and other surfaces, to avoid dust being stirred up.
- Hanging items vertically reduces the



chance of dust contamination.

- Varnish the area to be covered in small square sections, brushing both along and across the grain. The adjoining edges will still be relatively fresh and the varnish will flow together correctly.
- Good lighting is important. Regularly put your (dust-free!) head close to the varnished surface and look along it for areas you may have missed.

3 Clean out water tank and pipes

The scum that forms on boat tea, along with the plasticky taste, can seem part and parcel of boating: but you can improve matters by cleaning the tank. Flexible tanks can be removed and taken home – you can clean them in the bath with Milton sterilising tablets and a soft bottle brush. Built-in tanks are worth cleaning with Milton solution, followed by repeated rinsing and draining. If there's an inspection hatch, you can get your hand and a

sponge in to clean out any nasties. Also, run diluted Milton solution through the pipes to remove anything within. Any residual chlorine taste can be eradicated by installing a charcoal filter, which improves the taste of water no end.



4 Cutless bearing checks

A worn cutless bearing can cause vibration and lead to misalignment. The check is simply a case of seeing how much lateral movement there is between the shaft and the bearing. If it moves side to side by more than a few millimetres, it's time to replace the bearing: this can be a one-hour job or a 12-hour job if removal of the old bearing proves tricky.



5 Engine anode

Hidden away, the engine's anode is easy to forget – but to do so risks damaging the engine block and internals. Many are fairly inaccessible: this one, from a Yanmar 1GM10, is mounted inside the starter motor and requires some dexterity to remove. You'll probably also need a new gasket and anode seal.



6 Clevis pins

Even if your standing rigging is relatively new and shows no sign of damage (cracking, broken strands, etc) it's worth checking all clevis pins for damage and distortion. If in doubt, shelling out for a new set of pins for shrouds, forestay and backstay is unlikely to break the bank, but might give you peace of mind.



7 Anchor chain links

A quick check of your anchor chain should help you sleep better at anchor this season. Run it through your hands, checking for any damaged links, and pay particular attention to riveted links.



8 Steering gear nuts

Whitlock-type wheel steering is reliable, but running an eye over its linkages to check for any play in the ball-and-socket joints and for any loose or missing nuts could pay dividends in the year to come. Greasing the linkages will also help reduce wear and tear.



9 Seacocks

Move the handles of your seacocks to check if they are still operational, and grease them if possible. For ball valve-types, remove the hose and lubricate the ball inside, working the handle back and forth to loosen it up. Blakes-type seacocks should be disassembled and greased.



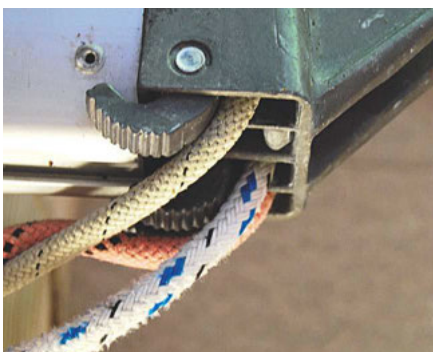
10 Expiry dates

Dark evenings present an ideal opportunity to take the first aid kit, fire extinguishers and other items with an expiry date home so you can go through their contents in the comfort of your house.



11 Sheaves

Check your sheaves are all turning freely while the mast is down. If they are stuck, first try a kettle-full of hot water poured over the sheaves to see if that loosens them up. Sheaves in sheave boxes may need replacing if damaged, with the pin needing to be driven out in order to remove the sheave. You may need to remove the sheave box from the mast to access the pins.



12 End-for-end reefing lines

Reefing lines tend to chafe where they've been cleated or secured with a jammer. Consider either shortening the line by a few inches from the boom end to move the wear point correspondingly, or, if there is significant wear, end-for-ending the line.



13 Gas hose

Gas hoses have a manufacturing date printed on them if they are rubber, or stamped on if they are armoured. Check any flexible hoses for cracks or degraded parts. Even if they look undamaged, they should be replaced five years after date of manufacture.



14 Check batteries

Perform a voltage check on your batteries and keep them trickle-charged over the winter. If they are wet-cell lead-acid, you should check the electrolyte level with a hygrometer – you can find a guide to doing this at www.pbo.co.uk/checkbatteries

THE PBO TEST TEAM



Ex-merchant navy officer Alex Bell sails a Bénéteau First 305 and lectures in maths and engineering at Southampton Solent University. **Favourite lifejacket on test:** Kru Sport Pro



Alan Watson is an ex-merchant navy radio officer and a Yachtmaster with commercial endorsement, and runs a 12.8m Nelson 42 powerboat. **Favourite lifejacket on test:** Kru Sport Pro



Adriana Mattei is a technology consultant, has sailed Lasers since the age of 12 and now sails a Malö 42. **Favourite lifejacket on test:** Secumar Ultra AX



Chris Savage is a student at Southampton Solent University completing his Yacht and Powerboat Design course. **Favourite lifejacket on test:** Crewsaver ErgoFit 190N Pro



Oksana Razina works at Southampton Solent University and is a club racer of yachts in the Solent in the role of navigator. **Favourite lifejacket on test:** Plastimo EVO 165



Five dedicated testers take to the RNLI College's training pool to assess various lifejackets for ease of donning, closure, comfort both in and out of the water, speed of deployment and all-round efficiency. Alex Bell reports

PBO regularly tests lifejackets, and it's pleasing to report that considerable progress in design and development over the years has resulted in improved performance. The RNLI College's training tank at Poole has contributed to this development because it can create waves, and waves make bigger demands on the jackets' ability to keep the casualty alive in the sea.

Our criteria was to focus on jacket sizes greater than the standard 150 Newtons (N) but not the very large 275N size: these are designed for those working on oil rigs, with tools attached and in extreme situations. Our target size was around 170N: some were 165N, and the largest went to 220N. Some manufacturers achieve this extra lift or buoyancy

with the same size gas bottle as a 150N lifejacket. Others fit a larger capacity bottle.

Probability of survival

All the jackets came with crotch straps: most had one, but some more expensive models had two. (Secumar favour one strap, arguing that if you fall into cold water you tend to curl into the foetal position, then the straps move down your thighs so you can't straighten up.)

As with crotch straps, sprayhoods greatly increase the probability of survival and are best purchased fitted to the jacket. Lights should be regarded in the same way: for regular and occasional night-time passages these are a must, but they are an easily added extra.

Modern lifejackets will turn us onto our backs when unconscious and keep us supported with our head out of the water. A new

innovation for the offshore sailor is the dedicated pocket for a personal life beacon (PLB) or AIS responder for man overboard recovery. Built-in pockets are useful for storing a knife or multi-tool, and this might encourage us to wear the jackets on a regular basis. Jackets are also so comfortable nowadays that we could forget we're wearing them.

Windows have appeared which tell us the status of the firing head, and some effort has been invested in ensuring that the inflation bottle doesn't come unscrewed and incapacitate the self-inflation feature. Terms such as '3D design' are appearing: more thought is being given to the jacket's shape before and after inflation.

Lifejackets can be conveniently divided into three categories: for day-sailing in sheltered waters, for coastal use and then offshore use.

Many yachtsmen would combine the last two categories together. So, for sheltered inshore sailing a basic lightweight jacket will suffice: but for coastal and offshore work we need all the safety extras including a harness attachment point, hood and light.

All the jackets tested were of the automatically-inflating type. The debate of manual versus automatic goes on: but for my money, in the event of a man overboard, cold shock can incapacitate the casualty and an automatically-inflating lifejacket will bring them to the surface in a safe position.

Lifejacket anatomy

Conventionally, leisure lifejackets have an inflatable bladder contained within a protective cover which is secured with either Velcro or a zip fastening. Two shoulder straps attach to a waist

How we tested them

Our test comprised two stages: 'dry' and in the water.

THE DRY TEST enabled the test team to try the jackets for ease of donning, closure mechanism, waist adjustment and wear comfort. Each jacket was tried on and tested while testers were moving around and sitting on a seat with a back rest. Most testers commented that they were 'comfy', but what was comfortable for some was not necessarily so for others. We also assessed how easy it was to rearm the firing head and replace the inflation cylinder, and finally repack and make the closure.

IN THE POOL, our testers jumped into the water from a height of 1m, and we timed how long it took for the jackets to fully inflate. They then had to locate and blow the whistle, deploy the sprayhood then swim to a four-man liferaft and climb aboard. We were interested to see whether an inflated lifejacket made this task any easier or harder.

Testers then re-entered the pool, swam to the side and attached a snap shackle to either a lifting loop or the harness attachment D-ring. They were then towed a short length down the pool to assess how the jacket supported them.

The final test was to lift them out of the water using a block and tackle, again attached either to the lifting loop or D-ring.



strap which has a fastening at the front. With modern jackets the shoulder straps at the back have either a mesh joining them or a back panel, which makes them much easier to put on.

Jackets can come with or without a built-in safety harness featuring a D-ring onto which a safety line (or lifeline) can be attached. All the jackets tested came with this safety line attachment ring (except the Crewsaver Crewfit 165 Sport): the ring can be constructed from stainless steel, or 'soft', made from tape or fibre.

Velcro gives instant access to any part of the jacket and makes for easier repacking. Zips create a more effective closure, but are more awkward to do up and can delay bladder inflation. Access to the bottle and firing head often necessitates undoing the zip all the way around the closure. Velcro can get 'tired' or caught in a guard wire and result in the closure opening prematurely.

The waist adjustment can be a single clasp or (better) double, one either side, designed so that the waist fitting can be simply tightened by pulling on both sides.

Crotch straps should ideally be stitched flat at the back and clipped onto the front belt with easy adjustment: two straps are better than one.

Jackets can be manual firing or automatic: all the jackets we tested were automatic. The firing head can have an inspection window to check its status, and will preferably offer quick access to both the firing head and the inflation bottle. Inflation bottles should have a device to stop them working loose.

Whistles should be easy to access, secured with a short line, and be effective in their output.

Sprayhoods should be easy to locate and deploy, be kept clear of the face and stop waves

interfering with breathing.

Lifting loop(s) should be easy to locate when the jacket is inflated.

All jackets came with an owner's manual, and some came with a storage bag.

Selecting a lifejacket and regular inspection

When purchasing a lifejacket, it's important to try it on first for comfort. If it's not comfortable to wear, you'll be less inclined to wear it, so it may not be there to save your life when needed.

You need to assess how easy it is to secure the jacket at the front buckle, and adjust the waist strap. This may require adjustment between hot and cold days when different

clothing is being worn.

You'll need to ask how to access the firing head and inflation bottle. Some shops will display an inflated jacket so you can see the manual inflation tube, the bladders, sprayhood, whistle attachment point, light location and lifting loop.

Once you've purchased your lifejacket, check the firing head status. This can be viewed through an inspection window on an increasing number of jackets, but if not you will have to open up the jacket cover to check the head. The cylinder tightness can be checked by feeling the cylinder through the jacket cover and bladder, but is better done by opening the cover.

International lifejacket standards

You may see two standards quoted for lifejackets intended for non-commercial use: EN 396 is the old European standard for 150N lifejackets, although some European countries don't accept it anymore. The EN standards have been widely accepted throughout the world and have now been incorporated into a new international standard, ISO 12402, proposed in 2006 and now in place. Thus you may see one or the two standards quoted for jackets purchased in the UK:

EN 396 for 150N category (with the CE mark) still valid and ISO 12402-part 3 for performance level 150N (with further parts covering materials [Part 7] and accessories [Part 8]). If you see BS EN ISO 12402 it tells you the jacket meets British, European and international standards.



Lifejackets on test under £135

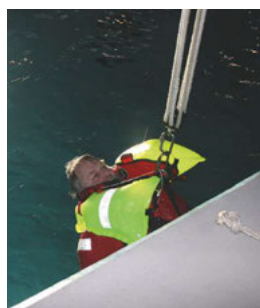
Kru 180 Commodore

PRICE: £96.92

Contact: www.oceansafety.com

Of traditional open strap design but with a rounded neck, this jacket has an integral removable crotch strap and twin lifting loops. Closure is by stainless steel bar buckle (harness version) or plastic buckle (waist belt version). Neither a sprayhood nor a light are fitted as standard.

WEAR COMFORT: The test team found this slightly difficult to put on, with a waist adjustment buckle that wasn't easy to adjust and a tight bar buckle for closure. Once fitted, it did not rate as the most comfortable.



IN WATER: This took 3 seconds to inflate, but the zip stuck on one side. The whistle was easy to find, but the twin lift beackets were not. At first Alan only found one, which tilted him to one side.

Kru Professional

PRICE: £119.95

Contact: www.oceansafety.com

Of traditional open strap construction but with a rounded neck and a heavy duty cover, this comes with an integral sprayhood (but not a light as standard), a removable crotch strap, twin lifting loops, a stainless steel bar buckle and a harness attachment D-ring. It is R10 AIS-ready.

WEAR COMFORT: The bar buckle was tight to locate and the waist strap (right-hand side only) was not popular with the testers. Again, there were mixed views on wear comfort: for some it fitted well, for others it felt on the stiff side.

IN WATER: This took 4.8 seconds to fully inflate, and the whistle and hood were easy to find. The lifting loops couldn't be located, so the D-ring was used for tow and lift-out. It felt comfortable in the water.



Seago 180 Olympic Plus

PRICE: £97.95

Contact: www.seagoyachting.co.uk

The new version of this jacket has a zip closure and comes with a sprayhood, removable crotch strap, pre-fitted light, mesh back panel, removable fleece collar and a Pro Sensor inflation system with 'Go/No-go' status viewing window.

WEAR COMFORT: This was easy to don, and the bar buckle has a wide slot so it's easy to close. Waist adjustment via a right-hand-side single buckle wasn't very easy. Some testers found the crotch strap rear attachment snap shackle uncomfortable against the backrest.

IN WATER: This took 4 seconds to inflate, and the whistle was quickly located. Likewise, the sprayhood was easy to find and deploy. Oksana described it as 'amazing', and the jacket felt comfortable in the water. The lifting loop was not easy to find because it is so short, but the lift was fairly comfortable.



Challenger Aqua-Pro

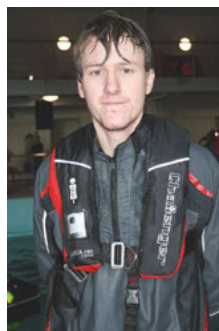
PRICE: £125.20

Contact: www.aquafax.co.uk

Designed with a slimmer fit, this jacket has a zipped cover with a storm flap. It has a mesh back with an integral pocket to stow away the crotch strap when not in use. The patented interlocking lobe design of the bladder is claimed to self-right the wearer in under five seconds. The jacket features an inspection window for the operating head and a pocket for a PLB/AIS or knife.

WEAR COMFORT: This was easy to don, with a metal closing bar buckle. Single waist adjustment was slightly tricky, but it was comfortable to wear with its fleece collar.

IN WATER: The jacket inflated in 4 seconds. Chris found it very comfortable, perhaps a little over-inflated. The whistle was easy to find, but with its long lead it subsequently detached itself. The lift was uncomfortable on the lifting loop. No version was available with a sprayhood.



Crewsaver Crewfit 165N Sport

PRICE: £106 (with light/sprayhood)

Contact: www.crewsaver.co.uk

The Crewfit 165N Sport uses the latest 3D technology in a bid to ensure maximum comfort levels. It has a soft loop D-ring for attaching a safety harness (with harness option), and is designed with a 'peninsular' chin support which is said to keep airways well clear of the water whatever the conditions.

WEAR COMFORT: This was very easy to don with a plastic closure 'clunk-click' fastening (non-harness version). However, testers didn't like the waist adjustment with a single clasp on the right-hand side. Everyone found it very comfortable to wear.

IN WATER: This took 4.8 seconds to inflate, one side before the other. The whistle was easy to find, and there was no hood or light on the basic model we tested. The lifting loop wasn't found on the first attempt, but once it was located, the lift was comfortable.



Plastimo 165 Pilot

PRICE: £125.44

Contact: www.bainbridgmarine.co.uk

This is a traditional strap design with Velcro closure and an integral harness attachment stainless steel D-loop. It comes with a single crotch strap, but a sprayhood and light are options. It has a window on the firing head.

WEAR COMFORT:

This was straightforward to don, but the bar and buckle fastening was difficult because the buckle was constrained tight to the cover on one side. Waist adjustment was by a single buckle on the right-hand side and not easy. Testers found the jacket quite comfortable.

IN WATER: This inflated in 4.82 seconds, first one side then the other, and the whistle was easy to find. This model has no hood. Adriana found the jacket very comfortable in the water but couldn't find the lifting loop, so she used the D-ring for the lift.



Marinepool ISO 180 Pro

PRICE: £109.99

Contact: www.marathonleisure.com

This new model has a zip outer cover closure, coarse polyester webbing to prevent buckle slippage, a single crotch strap, a removable padded fleece collar and a mesh cape back strap. It also has a UML Pro Sensor firing head with a status window, an integral safety harness attachment and a built-in sprayhood and light.

WEAR COMFORT: The bar buckle was fairly easy to close, and waist adjustment on the right-hand side was straightforward. Opinions varied regarding wear comfort, but the crotch strap rear attachment snap shackle was uncomfortable against the back rest.

IN WATER: This inflated in 4 seconds, and the whistle was easy to find although the hood, located behind the neck, was harder to locate. It was simple to deploy. Chris couldn't find the lifting loop, so he used the D-ring and this gave a fairly comfortable lift.



Plastimo 165 Evo

PRICE: £130.44

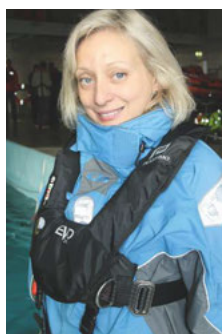
Contact: www.bainbridgmarine.co.uk

This has an unusual closed horseshoe outer shell design with a foam-padded patch on the stomach, integrated to the waist belt. It has a double crotch strap, with the harness attachment D-ring on the left-hand side.

WEAR COMFORT:

This was very quick and easy to don, but the bar and buckle were a little tricky to close. Adjustment required a pull on one side. Some testers found it a little uncomfortable around the neck, others found it bulky low down at the front.

IN WATER: This took 5 seconds to inflate, and the whistle was easy to find. When towed, Oksana was initially splashed with water, but the jacket then orientated onto a side tow position and presented no problems. The jacket felt comfortable in the water, and the lifting loop was easy to find and gave a fairly comfortable lift.



Crewsaver Crewfit 180 Pro

PRICE: £136 (with light/sprayhood)

Contact: www.crewsaver.co.uk

Like the Crewfit 165N Sport, this was designed using 3D technology to increase comfort and features a peninsular chin support. It has twin, forward-pull waist adjusters and a soft loop D-ring for attaching a safety harness (with harness option).

There's an attachment point for an S20 AIS unit, which would activate automatically on inflation. A triangular indicator window shows the status of the inflator head.

WEAR COMFORT: This was simple to don with a classic bar buckle fastening, and the forward-pulling waist straps made adjustment easy. All testers reported a comfortable fit.

IN WATER: This took 4.2 seconds to inflate, and the basic model we tested had no light or sprayhood. Whistle access was good. Chris liked the lifting loop: 'That's definitely more comfortable on a lifting becket'.



Secumar Ultra AX Plus

PRICE: £149.00

Contact: www.secumar.com

A more conventional style than Secumar's Survival 220 (p.27), this includes a front 'clunk-click' buckle (good for cold hands), the firm's 'Flat-Pack' system, a bayonet-fixing gas cylinder to stop leakage and corrosion, an inspection window, a crotch strap and a fitted sprayhood – all as standard. It can be changed to manual operation, and a light is optional.

WEAR COMFORT: This was easy to don and secure with the clip. Most of the team reported the waist strap adjustment on the right-hand side as easy to operate and generally found it comfy to wear, but not as good as the Survival.

IN WATER: This was slow to fully inflate, taking 10.3 seconds. The whistle and hood were simple to locate and deploy. Adriana found the lifting loop 'very easy', reporting a high comfort level in the water and a comfortable lift.



Baltic Winner 165

PRICE: £141

Contact: www.baltic.se

A traditional 'strap' jacket, now with zip instead of Velcro closure. Special features are the two 'quick release' openings, one to access the mouth inflation tube and the other for the gas inflation mechanism. The harness version has metal bar buckle closure, while the non-harness version has a 'clunk-click' fastening.

WEAR COMFORT: The traditional strap back can make donning more clumsy, and side waist adjustment was 'fiddly' with one side only. Not as comfortable as the Baltic Race.

IN WATER: The jacket inflated in 3 seconds. The whistle was a little awkward to find, but the hood was straightforward to deploy. Alan couldn't find the lifting loop and had an uncomfortable lift on the D-ring, but otherwise appreciated the jacket's comfort in the water.



Crewsaver ErgoFit 190N Pro

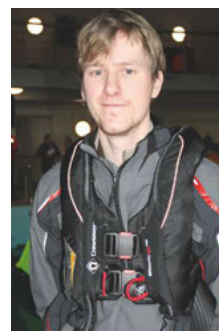
PRICE: £165

Contact: www.crewsaver.co.uk

The ErgoFit 190N Pro is another 3D-moulded lifejacket, designed for coastal water users. It has adjustable fast-fix rear buckles, and a built-in inflatable chin support tilts the neck back and keeps airways clear. Its uniquely crafted bladder is intended to deliver a faster turn speed and also keep one's airway lifted further above the water. It is AIS-compatible (this would activate automatically on inflation).

WEAR COMFORT: This was very easy to don, with a twin 'clunk-click' closure and two forward-pulling straps to tighten the waist. Two red straps on the back release the waist. With its double soft attachment rings and twin crotch straps, most testers found this a very comfortable jacket.

IN WATER: This inflated in less time than it took Chris to surface (3 seconds). The whistle was readily accessible, but the sprayhood was tight across the face. The tow was good, and Chris commented that the lift was 'tight'.



Lifejackets on test over £180

Kru Sport Pro

PRICE: £189.95

Contact: www.oceansafety.com

Of innovative design with its waistcoat-style shape and zip closure, this comes with tailored neck, a dual adjustment padded waist belt, two soft eye harness loops, an inflation system inspection window inside a pocket, a further pocket, two engine kill-cord loops, two lifting loops and a removable crotch strap. A sprayhood is standard on the harness version, and a light is optional.



WEAR COMFORT: This was simple to don, with a straightforward zip to secure. Waist adjustment was very easy, with two straps to pull forwards. There were mixed views on comfort: Adriana loved it, but others found it less comfortable.

IN WATER: One side inflated first, followed by the other (7.6 seconds). The whistle and hood were easy to find, but the hood was tricky to deploy. The lifting loops were hidden behind the bladders, and the soft harness attachment loops did not fall readily to hand.

Baltic Race 150 SL

PRICE: £199

Contact: www.baltic.se

This represents a new generation of lifejacket with a padded anti-tangle back and padded shoulders for comfort. The integrated safety harness is front-fastened with adjusters on both sides. Features include a fleece collar, a detachable crotch strap and a firing head status window.



WEAR COMFORT: The team found this lifejacket easy to don and the waist straps simple to adjust. The steel bar buckle was relatively easy to close and open, and the jacket was very comfortable to wear. Alan commented: 'you sort of forget that it's on, which is good.'

IN WATER: The zip on one side of the jacket stuck momentarily on inflation but didn't seem to affect the inflation time, which took 4 seconds. The jacket towed well but the whistle wasn't easy to locate and the lifting loop was a little tricky to find. The lift was uncomfortable.

Spinlock Deckvest 5D 170N

PRICE: £219.95

Contact: www.spinlock.co.uk

This 3D compact design jacket has a 'Shoulder Fit System' which flexes and locates to give a correct fit on the shoulders. It has double crotch straps with recessed clips, and an LED light with a flexible 23cm antenna. It also has hidden, non-snag back adjustment, a quick-access emergency safety line cutter and a mesh pocket for a handheld VHF or PLB locator.



WEAR COMFORT: This was easy to don: the soft closure buckle was well liked. Waist adjustment was good, with two straps pulled backwards to tighten. All testers found it comfy in the correct jacket size (there are three sizes).

IN WATER: This inflated in 4 seconds. The whistle was accessible (and loud!) and there was no need to detach it. The sprayhood was easy to find and deploy, an important feature as it pulls the two bladders together and stops water slopping into the mouth. The light on a stalk was highly visible. The double crotch straps felt snug, while the lifting becket was quickly located and the lift fairly comfortable.

Lifejackets on test at-a-glance

Make/Model	Baltic Race 150 SL	Baltic Winner 165	Challenger Aqua-Pro	Crewsaver Crewfit 165N Sport	Crewsaver Crewfit 180 Pro	Crewsaver ErgoFit 190N Pro	ISP AIS Recovery	Kru 180 Commodore	Kru Professional	Kru Sport Pro
Firing head	UML Auto Pro	UML Auto	UML Pro Sensor	UML Mk 5	UML Pro Sensor	UML Pro Sensor	UML Pro Sensor	UML	UML Mk 5	UML Pro Sensor
Bottle capacity (g)	33	33	33	33	38	38	33	38	38	38
Buoyancy (N)	165	165	170	165	180	190	170	180	170	180
Sprayhood	Yes	Option (£24)	No	Option in pouch (£16.50)	Extra retro fit (£16.50)	Yes	Yes	Can be retro-fitted	Yes	Yes
Light (cost)	Yes	Option (£8)	Option	Option (£19.50)	Option (£19.50)	Yes	Yes	Option (£19.96)	Option (£19.52)	Option (£19.52)
Storage bag	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Crotch Straps	Single	Single	Single	Single	Single	Double	Single	Single	Single	Single
Cylinder status window	Yes	No	Yes	No	Yes	Yes	Yes	No	No	Yes, through pocket
Special features	Padded back separator window to firing head	Traditional design, easy access to firing head	Zippered pocket, mesh back, soft collar	Light weight, chin support, soft D-ring	Integral back twin waist adjusters, soft loop D-ring	Double clunk-click closure	Buddy window for firing head and AIS	Traditional design rounded neck	Traditional design heavy duty cover	Zip front fastening 2 x zip pockets
Cover closure mechanism	Zip	Zip	Zip	Zip	Zip	Zip	Zip	Zip	Zip	Zip
Warranty (yrs)	5	5	3	3	3	3	3	2	2	2
Jacket MRP inc vat	£199 as tested	£109 as tested	£125.20 as tested	£70 as tested	£100 as tested	£165 as tested	£349.95 as tested	£76.96 as tested	£119.95 as tested	£189.95 as tested
Total price complete inc VAT	£199.00	£141.00	£125.20	£106.00	£136.00	£165.00	£349.95	£96.92	£119.95	£189.95
Rearming kit inc VAT	£25.00	£25.00	£16.20	£25.00	£27.60	£27.60	£17.95	£19.96	£19.96	£19.96



The Spinlock Deckvest bladders felt too far apart



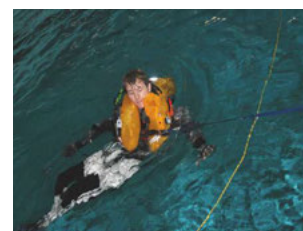
The Baltic Race whistle wasn't easy to locate



The Baltic Winner whistle was positioned here...



...but would have been easier to find if it was here



The Crewsaver ErgoFit inflated quickly and towed well

Secumar Survival 220

PRICE: £274.30

Contact: www.secumar.com

At 220N, this offered the largest support of the lifejackets tested. It has winglet bladders for quick turning action and higher freeboard and stability, an ergonomically pre-formed shoulder area, a shorter cut rear padded webbing harness and a clunk-click closure buckle. It has Secumar's 4001S firing system with bayonet cylinder attachment and manual override to disarm the automatic mechanism. It has a pocket for a small PLB, and an inspection zip so you can check or change the gas bottle. A light is optional.

WEAR COMFORT: This was easy to don, and testers liked the 'clunk-click' closure. Waist adjustment on the right-hand side was straightforward, and the jacket felt comfortable, especially around the neck.

IN WATER: This took 11 seconds to fully inflate. The whistle was easy to find, and the hood was easy to deploy. Oksana couldn't find the lifting loop, so she used the D-ring and reported a very comfortable lift.



ISP AIS Recovery

PRICE: £349.95

Contact: www.ispl.co.uk

Built in the UK, this was the only jacket tested with an AIS recovery unit (an Ocean Signal MOB1, included in the purchase price) fitted to the jacket, with an inspection window. When the jacket is inflated, the AIS unit is automatically activated and the whip antenna is deployed. ISP manufactures lifejackets for the military and a number of outlets, including the Challenger jackets sold by Aquafax. With a mesh back and firing head window, the jacket has a steel closure buckle and a soft D-ring.

WEAR COMFORT: This was easy to don, but the steel closure bar buckle was a tight fit.

Waist adjustment by a right-hand side slide wasn't found to be particularly easy. The padded neck was popular, and it was a comfy jacket to wear. Alan said: 'I'm happy with it'.

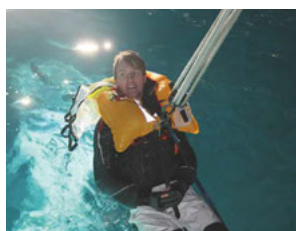
IN WATER: It took 4 seconds to fully inflate, and the whistle was hard to find. It felt comfortable in the water, but the lift was very uncomfortable as there was a lot of load on the crotch strap. Alan couldn't find the lift loop so he used the soft D-ring.



Marinepool ISO 180 Pro	Plastimo 165 Pilot	Plastimo 165 Evo	Seago 180 Olympic Plus	Secumar Survival 220	Secumar Ultra AX Plus	Spinlock Deckvest 5D 170N
UML Pro Sensor	UML Pro Sensor	UML Pro Sensor	UML Pro Sensor	4001S	4001S	5D Pro Sensor
38	33	33	38	43	32	33
180	165	165	180	220	175	170
Yes	Option (£27.50)	Option (£27.50)	Yes	Yes	Yes	Yes
Yes	Option (£12.99)	Option (£12.99)	Yes	Optional (£26.40)	Yes	Included
Yes	Store	Yes	Yes	Yes	Yes	No
Single	Single	Double	Single	Single	Single	Double
Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soft collar, cylinder status window	Window on firing head	Innovative over-head design	Cylinder status window, fleece collar	Click buckle, two pockets	Click buckle, inspection window	Mesh pocket, line cutter, rapid fit with 'double' buckle
Zip	Velcro	Velcro	Zip	Zip	Velcro	Zip
5	3	3	5	10	10	2
£109.99 as tested	£84.95 as tested	£89.95 as tested	£97.95 as tested	£247.90 as tested	£149.90 as tested	£219.95 as tested
£109.99	£125.44	£130.44	£97.95	£274.30	£149.00	£219.95
£16.95	£16.99	£16.99	£16.95	£26.38	£24.68	£19.95



The Kru Sport Pro allowed the wearer to swim easily



The Marinepool gave a fairly comfortable lift on the D-ring



The ISP was described as comfortable to wear

PBO verdict

The automatic firing heads all worked and the jackets inflated automatically, but there was a slight delay with some of the zipped models.

The jackets all brought our 'casualties' into the correct support position with their heads well clear of the water. Whistle access varied: some were difficult to locate, and most weren't very loud. Once used, if not secured, some drifted around on long lines and could become detached. The best whistle was on the Spinlock Deckvest: it could be easily located and blown without detaching it from its holder.

Deploying the hood produced mixed results. All were stowed behind the head and required pulling forward. Some were difficult to locate, others were easy, and some were tight when secured around the front of the bladders. The best hoods had a supporting ring which kept them off the casualty's face: the Marinepool ISO 180 Pro and Seago 180 Olympic Plus.

The lifejackets neither hindered nor assisted entry to the liferaft: as soon as one puts weight on the step the jacket stops giving support. The jackets' bulk caused no hindrance entering the raft.

Lifting out

The location of the towing/lifting loop was an issue. It was often impossible for the casualty to quickly find the loop, in which case the harness attachment D-ring would be employed. With some jackets, lifting by the becket was more comfortable than the harness: this occurred when the becket attachment point was further towards the head. The crotch strap(s) assisted with the lift and were able to take the load. The most accessible lifting loops were on the Secumar Ultra AX Plus, Plastimo 165 Evo and Spinlock Deckvest.

Most jackets were simple to rearm and repack. Zips required taking back to the start position, and Velcro was easier. The most difficult jackets to repack were the snug ones: the Baltic Winner, Crewsaver ErgoFit 190N and Spinlock Deckvest.

The larger jackets were particularly good at supporting the casualty in a lively sea situation, but all jackets performed well.

The best buckles for easy use were the 'clunk-click' type – Crewsaver ErgoFit and 165N Sport, Secumar Survival 220 and Ultra AX – while zips were rated next best (Kru Sport Pro). The Baltic Race 150 SL, Crewsaver 180 Pro, Crewsaver ErgoFit 190, Spinlock 170 Sport and Kru Sport Pro offered the easiest waist adjustment.

On a point-scoring basis, the top jackets were the Crewsaver ErgoFit 190N, Kru Sport Pro, Secumar Ultra AX and Spinlock Deckvest. Of the budget jackets, the high scorers were the Marinepool ISO 180 Pro and Seago 180 Olympic Plus.

Prices quoted are RRP including VAT: these can often be bettered at chandleries.

Start me up

Fate lent a hand while PBO was sourcing a second-hand engine to replace the PBO Project Boat's terminally corroded lump: David Pugh describes the procedures required to coax the initially reluctant BMW D7 substitute into life



OUT WITH THE OLD...

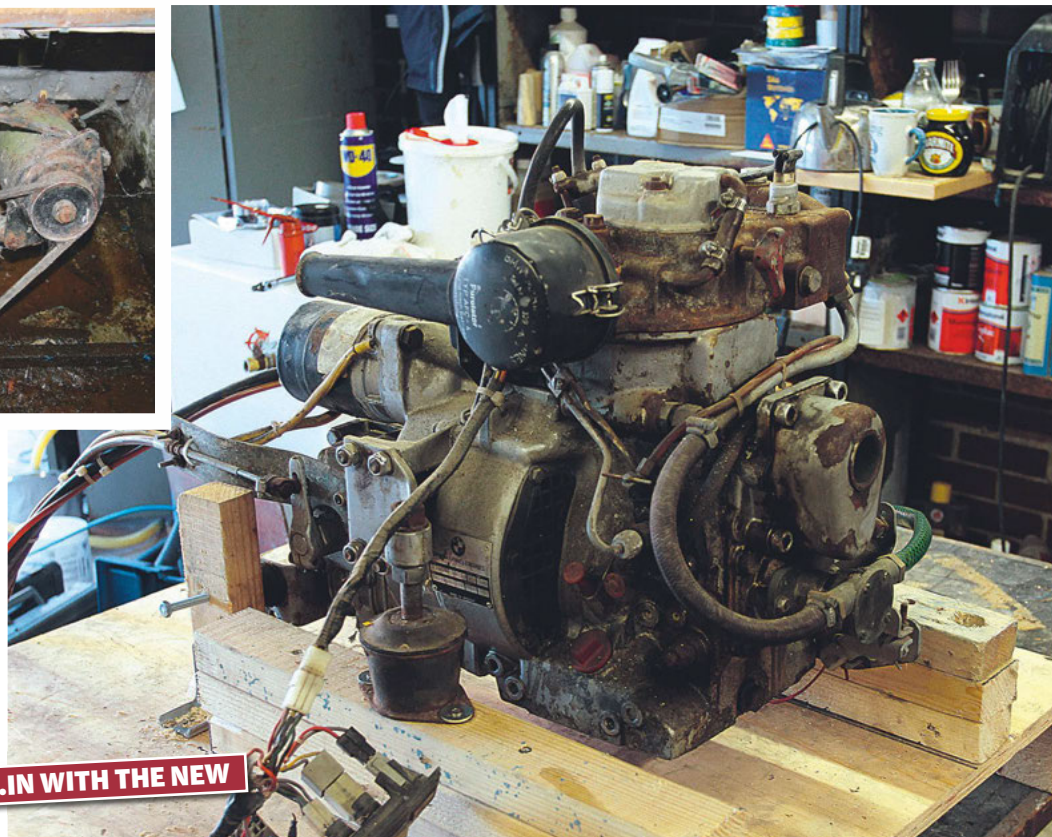
Regular readers will remember that when we first acquired our project Snapdragon 23, *Hantu Biru*, she was fitted with an inboard engine. At least, it had been an engine, but was by then a mass of corrosion.

This rusty lump had started life as a Watermota Super Shrimp, based on an 8hp petrol unit from Briggs & Stratton and modified with a propeller with a manually variable pitch. This dispensed with the need for a gearbox, as well as giving the user the ability to pitch the prop according to the conditions – potentially a neat idea, and certainly one we were keen to try out.

However, despite getting the piston moving and repairing two significant holes in the engine casting, it was this transmission that finally put paid to any idea of reuse. The complex casting which carried the propeller shaft and transferred the movement of the pitch control lever to the propeller had corroded so much that, even if we had unseized the pivots, they would never have been strong enough to use under load.

The search

With the decision made to change the engine, there was no question in our minds that a diesel was the right choice. Petrol is hazardous at the best of times, with similar



...IN WITH THE NEW

Hantu Biru's Watermota Super Shrimp, above left, was beyond redemption: her replacement engine is a BMW D7, above

storage restrictions to bottled gas. With that in mind, we started looking around for a diesel engine with an output between 6hp and 12hp, preferably complete with its shaft and gearbox. We weren't concerned about the make, but weight was important as *Hantu Biru* has a tendency to drag her transom, slowing the boat.

Light weight can be a hard target to achieve with second-hand diesel engines. The tendency has been for engines to get lighter – when we re-engined my own boat *Red Dragon*, we saved around 40kg and gained 4hp.

However, there are some light older engines out there. We started out looking for the ever-popular Yanmar 1GM, but then fate intervened in the form of reader

Stefan Bartkowiak. Stefan had a BMW D7 on which he had been working as part of a bigger project, but the boat had now gone and he no longer needed the engine. Complete with shaft, propeller, gearbox and electrics, he donated it to PBO – thank you, Stefan!

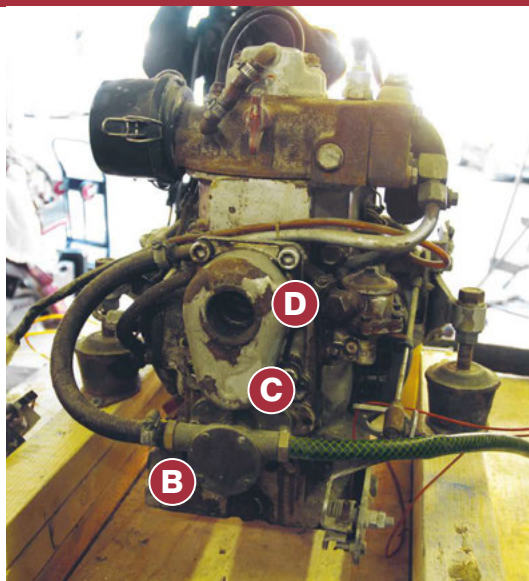
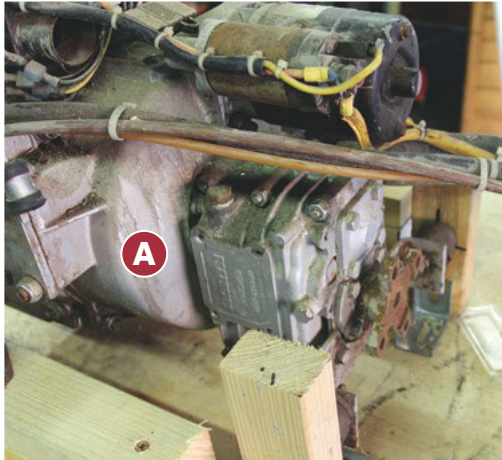
The BMW D7

The BMW D7 fits the bill perfectly for us. Developing 6hp, it weighs just 68kg together with the gearbox (excluding the oil) – 2kg less than the 7.5hp 1GM. From what we could find online it seems a reliable unit, except for an Achilles heel – the charging system.

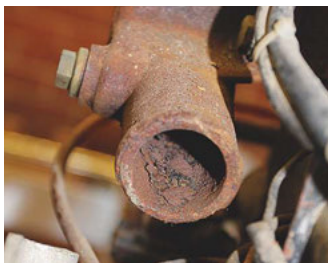
This is built into the flywheel at the rear of the engine, and generates a single-phase alternating current. In itself this is much less smooth than

the output of a conventional three-phase alternator, but is made much worse by the regulation method, which is to saturate the iron stator on alternate half cycles and hence reduce the output. This spiky output can play havoc with delicate electronics and for this reason, combined with the inaccessibility and reported unreliability of the system, many D7 owners have sought alternative charging methods.

We plan to follow suit and fit an external alternator. There are four possible locations from which to take the drive: the camshaft, the starting handle dog, the water pump spigot and the flywheel. The first and second options would remove the ability to hand-start so we have discarded them, but either



Four locations exist to fit an alternator: the flywheel (A), water pump (B), camshaft (C) or starting handle socket (D)



Loose corrosion was found in the exhaust elbow, but it seems sound



Dismantling the fuel pump revealed nothing amiss



The cock on the fuel return line was clogged with varnish

of the others may be viable. However, if it is recoverable we may keep the original system and dedicate it to charging an engine start battery, where the voltage spikes will do little harm.

Getting ready

There's a feeling of trepidation with engines you've never seen run. Until you give it some fuel and a few spins, there's no telling whether you're looking at a useless lump of iron or a reliable workhorse that will give you the unfussy assistance you need whenever wind, tide or time fail to serve.

Single-cylinder diesels are fortunately pretty simple, but before trying to start the engine we needed to make sure we could control it if it did start, which meant mounting it properly. We used an old pallet and some scrap wood to build a frame to which the engine mounts would fit. We then ran a few basic checks.

Turning the engine over on the handle showed that it turned over and had compression. The D7 has rather a neat hand-start system, with a geared drive for the handle and a decompressor which allows the engine to spin four times before automatically dropping. A visual inspection of the air filter showed that it could do with replacement

but was adequate for test purposes, while dismantling the water pump revealed the impeller to be in good order. The exhaust elbow showed some signs of corrosion, but seems in fair condition.

We next moved our attention to the fuel lines. Although the fuel feed pipe seemed OK, there was a lot of varnish in the return pipe which made us wonder if the fuel system was clean. Dismantling the fuel pump revealed nothing amiss, although we took the opportunity to remove some debris from the bottom of the chamber. Similarly, there was no sign of varnish around

the injector unions, but we did find considerable deposits on the return side of the injector pump. There is a small valve here leading to the return pipe which was completely clogged.

To clean it, we removed it from the engine and soaked it in petrol until the valve could be moved with gentle persuasion from a spanner. Once apart, more petrol and some scraping removed the remaining deposits and allowed the valve to move smoothly. The return pipe we cleaned by pulling a string through it several times, but we may replace this later.

Finally, we checked the oil. The

engine oil appeared new – if oil in a diesel looks clean and feels oily it's a good bet that the engine has barely run – but the gearbox oil was very low. To be sure we drained the remainder and refilled it.

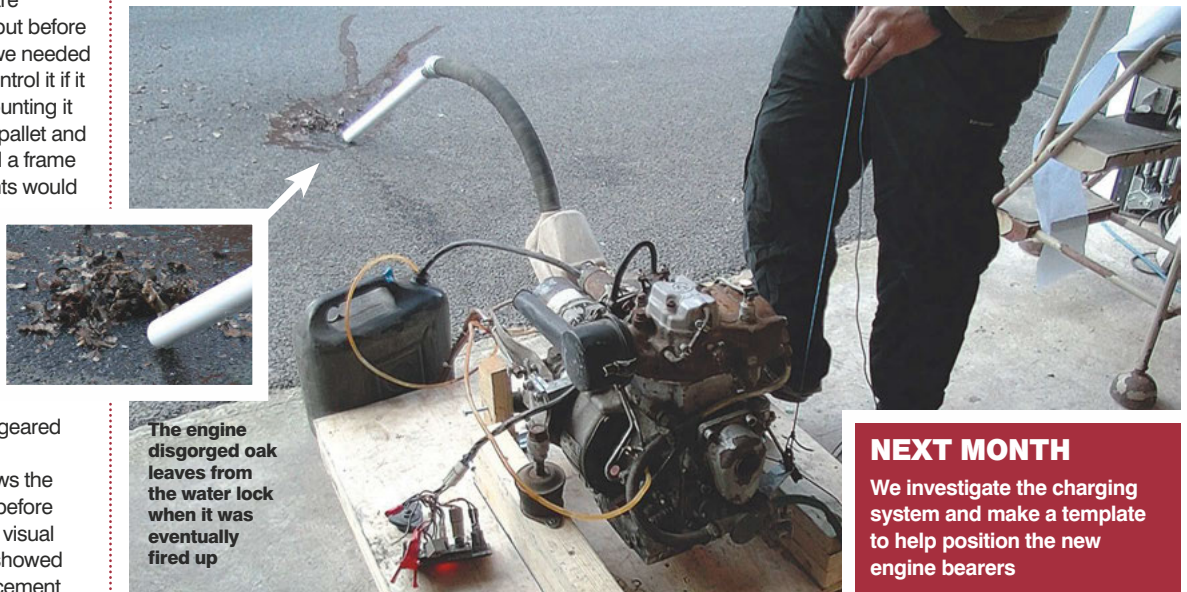
Suck Squeeze Bang Blow

With our checks complete, the moment of truth was upon us. We connected the exhaust, dipped the fuel lines in a can of diesel, dropped the cooling intake hose into a bucket of water, connected the battery and pushed the starter. Nothing happened.

Suspecting an electrical fault, we checked all the high current cables. They proved OK, so we moved on to the maze of control wiring and spotted an in-line fuse holder in the starter solenoid wiring. It had blown, but a check of the rest of the wiring showed no reason for it to have done so. Fingers crossed, we replaced the fuse, set the decompressor and pushed the button again.

It churned a bit, showing that the new fuse had solved the problem, but the engine still failed to start. We had done our best to prime the fuel system by hand using the manual lever on the fuel pump, but I suspect it still had plenty of air in it as on the second attempt the engine coughed, fired, faltered and finally ran, spitting a gout of oak leaves from the water lock out onto the car park outside our workshop.

The engine seems a good one. It revs freely and runs reliably – so far – but we'll check the clearances, lubricate it where required and give it a coat of paint before installation. First, however, we need to sort out the charging. Good though the hand-starting system seems to be, I don't fancy it much...



The engine disgorged oak leaves from the water lock when it was eventually fired up

NEXT MONTH

We investigate the charging system and make a template to help position the new engine bearers

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A Croatian cruise

Despite cautionary words from friends about the wisdom of sailing a 55-year-old Fairey Atalanta around Croatia, Chas Hammond did just that: and had the cruise of a lifetime



We were planning to tow our 55-year-old, 7.9m (26ft) Fairey Atalanta sailing boat 1,100 miles to Italy, launch her and then sail to Croatia. Why? Well, our friends Dinah and Trevor Thompson had made a similar journey, several times, and they said it was ok. Other friends pointed out the pitfalls. 'With no disrespect, *Walrus* is pretty old. What about all the leaks you've been complaining about? The dodgy rigging, the paper-thin sails? And is your engine reliable? With the cost of getting her there, wouldn't it be cheaper to charter a luxury yacht?'

ABOUT THE AUTHOR



Chas Hammond and his wife Mandy trailer-sail their 26ft Fairey Atalanta along the South Coast, France and Croatia and race their Wayfarer out of Shoreham-by-Sea.

Patently, there were numerous problems to address, so the winter was spent working on *Walrus* to prepare her for her six-week cruise. We fitted two new batteries, a new starter motor and solenoid, and replacement pulleys to take the new V belt; we serviced the engine and keel, strengthened the rudder stock, replaced the rigging and fitted new (second-hand) sails for the main and genoa; we purchased a new depth sounder and chart plotter, upgraded the navigation lights and attacked the leaks with G4 and epoxy resin. Finally, we serviced the boat's trailer: we carried spare bearings, a light board and two spare wheels, plus a full toolkit and trolley jack.

Departure day eventually dawned: we drove from Sussex to meet the Dover-Calais ferry, and on arrival in France, drove through the night as far as Reims. The following day we crossed the Alps via the Mt Blanc tunnel, making an overnight stop in Aosta, Italy. Another day's driving found us at our destination in northern Italy, the Cantieri Marina San Giorgio di Nogaro, which has excellent facilities for launching and provides safe storage for

car and trailer. Launch and recovery cost €70 each, while car and trailer storage costs €5 a day.

Good northerly breeze

After spending a day preparing *Walrus* – mast up, fuelled up, watered up, provisioned up and boozed up – we set sail for Umag on the Croatian mainland, a six-hour passage, in calm sunny weather. When we got there we took a mooring buoy, dived into the warm, clear water and had a beer – but soon discovered that we should have cleared customs before taking a buoy. We were severely reprimanded, with threats of fines and/or imprisonment for our misdemeanours, but eventually managed to joke our way out of a potentially tricky situation.

The Istrian Peninsula is beautiful, and we could have easily spent more time exploring the ancient towns and ports along this coastline, but we made the most of a good northerly breeze which pushed *Walrus* along in flat seas at a steady 4 knots, with the spinnaker filling most of the way. We stopped at Rovinj and Veruda, covering roughly 45NM before making our crossing



to the island of Otok Unije, again making the most of the northerly breeze.

Unije proved to be magical. We took a buoy in Maracoli Bay on the north-east shore, a well-sheltered mooring exposed only to the east. There are no facilities, but supplies can be found at the village of Unije, a 30-minute trek over a large hill. We found fantastic walking routes on well-signposted trails, sometimes walking on top of ancient stone walls. The colour and clarity of the water is beyond description.

We could have happily remained on this island paradise, but had arranged to rendezvous on the island of Losinj with Jane and Chris (my sister), who had travelled there by camper van. During our ensuing five-day cruise with them, we visited the north Adriatic islands of Losinj, Ilovik, Silba, Premuda, Skarda, Ist and Molat, all characterised by tranquil, secluded bays surrounded by masses of aromatic olive and pine trees. The interiors can be explored on well-trodden tracks which usually lead to a village bar and a well-stocked shop. At Krivica Bay on Losinj there's also a track which climbs 250M to the top of the island, giving an amazing 360° panoramic view of the outlying islands. The boatman calls here to collect his dues, armed with bread, cheese, cake and fruit.

The weather remained hot and sunny: we spent our time swimming, snorkelling, playing cards, and cooking on driftwood fires. Most of the time, we just had ourselves for company – just as well, as we were enjoying the freedom of not wearing clothes!

We sailed back to Losinj, helped by a favourable southerly wind which was the first sign of unsettled weather, resulting in a fantastic thunderstorm and light show. Luckily we were safely moored in the town marina, awaiting the arrival of our second daughter Amy and her partner Andy, who were to be our next passengers.

A blotted copybook

Amy and Andy arrived after flying into Trieste in northern Italy (via a £29 Ryanair flight from Stansted), where they hired a car and drove to Brestova on the Istrian peninsula to take a ferry to Cres and Mali Losinj. *Walrus* blotted her copybook slightly, resulting in soaked bedding and clothing: a little reminder that she's an old girl and needs constant attention, love and care. Luckily the sun came out and matters improved.

Our cruising area was restricted by having to be back in Mali Losinj four days later to meet our next guests, so we sailed to the island of Susak, 5.5NM west of Losinj, where we took a buoy outside the harbour. Susak has sandy beaches – a rarity in Croatia. The supply ship *Premuda* calls twice daily and is met by islanders pushing their wheelbarrows to collect an array of goods: the supply ships are the lifeblood of these island communities, and the tourists they bring generate much-needed revenue. The



Walrus in paradise – Maracoli Bay on the island of Otok Unije

harbour master and his assistant were most helpful, and refused to take any mooring fees from us.

Susak has its own variety of grape, which is made into a very palatable wine. The old village, 100m above the harbour, is a fascinating labyrinth of old buildings – a reminder of when Susak's population was nearly 2,000 strong, before mass exodus to America. You can walk round the island to visit the lighthouse, the sandy bays, the vineyards and the chapel. From Susak we sailed to Unije via Strakane, where we were treated to a spectacular sunset from the vantage point of the local bar.

The next day we had a brisk sail around the northern tip of Losinj to the small town of Osor, with its Roman ruins and modern-day sculptures. Here a swing bridge over a small canal connects the island of Cres and Losinj, opening twice daily.

We spent the night at Nerezine, a pretty little port on the east coast of Losinj. The

following day we continued down the coast for a lunch stop and swim at Luka Sveti Martin. The coastal path is particularly pretty here, with pine trees hanging into a clear blue sea. We tied up alongside the town quay at Veli Losinj, a stunningly beautiful old port, and bought ice creams before setting off for our night anchorage in the passage between the islands of Ilovik and Sveti Petar.

However, the barometer dropped and the wind went south and blew relentlessly. We were compelled to seek the peace and tranquillity of terra firma. It was a great island for beachcombing on the exposed south-west-facing coast. For the first time we were forced to eat out, indulging in a superb fish platter and copious amounts of beer.

The weather held us here for an extra night, necessitating an early start in rough seas for our rendezvous with the 0900 Pula/Zadar fast catamaran service in Mali Losinj to collect our next cargo!



LEFT The old town in Veli Losinj, 5km from Mali Losinj

BELOW A full complement: at one point, *Walrus* had seven people on board



Sunset over Ilovik with Mandy, Amy and Andy

All seven at sea

Jenny (our third daughter), her partner Adrian and their 10-week-old baby Albert arrived in Mali Losinj having flown into Pula from Stansted the previous day (£24 via Ryanair). After a full English breakfast we set off for Susak, a suitable base for a boat with a baby and six adults on board. However, our plans were scuppered by the law of sod. A choppy sea claimed its first seasickness victim, then this was followed by the engine dying. *Walrus's* well-drilled crew leapt into action and raised the sails.

We sailed onto a buoy and everyone went swimming while the skipper tackled the engine problem, caused by air in the fuel line resulting from a low fuel level in the tank, combined with the rough seas.

With only four berths on board, Amy and Andy pitched their tent on the sandy beach and had a much more comfortable sleep than anyone on board, what with the heavy cross-swell. The second night we went

into the little harbour, and Amy and Andy took a room ashore. The days were filled with swimming, diving, fishing, sunbathing, walking and visiting the little bars.

Reluctantly we set sail from Susak and headed for the equally wonderful Maracoli Bay on Unije, where Amy and Andy spent their last night with us.

As Albert had now found his sea legs and the weather was still glorious, we headed south. We loved Olib, Silba, Molat, Sestrunj, Dugi Otok and Ugljan and could have continued our travels south, but our crew had a ferry to catch from Zadar. Our last night together after 10 unforgettable days was spent in Zadar Marina: chalk and cheese to what we had been doing previously as Zadar is a busy port with several museums. We waved goodbye to our passengers, and both *Walrus* and the ferry headed north to Pula.

Bored of the bora

The bora is a strong, cold, dry north-easterly wind, but it usually brings clear blue skies, which the locals told us can last for up to nine days. We left Zadar in a good south-westerly breeze and made Olib by the evening, arriving in the dark and securing a mooring buoy in Luka Sveti Nikola. At this point, we must thank Trevor and Dinah Thompson for their fantastic Adriatic pilot: when the weather turned it was an invaluable source of information. We awoke the next morning to rain, cloud and a strong south-easterly wind combined with a big sea: the forecast was marginal, but we set off knowing we could take shelter at Silba, a nearby island. *Walrus* surfed her way north, loving every wave: we recorded 9.2 knots, a bare-knuckle

ride but exhilarating for the crew of two! We made record time to Mali Losinj, where we took refuge from the bora for three days.

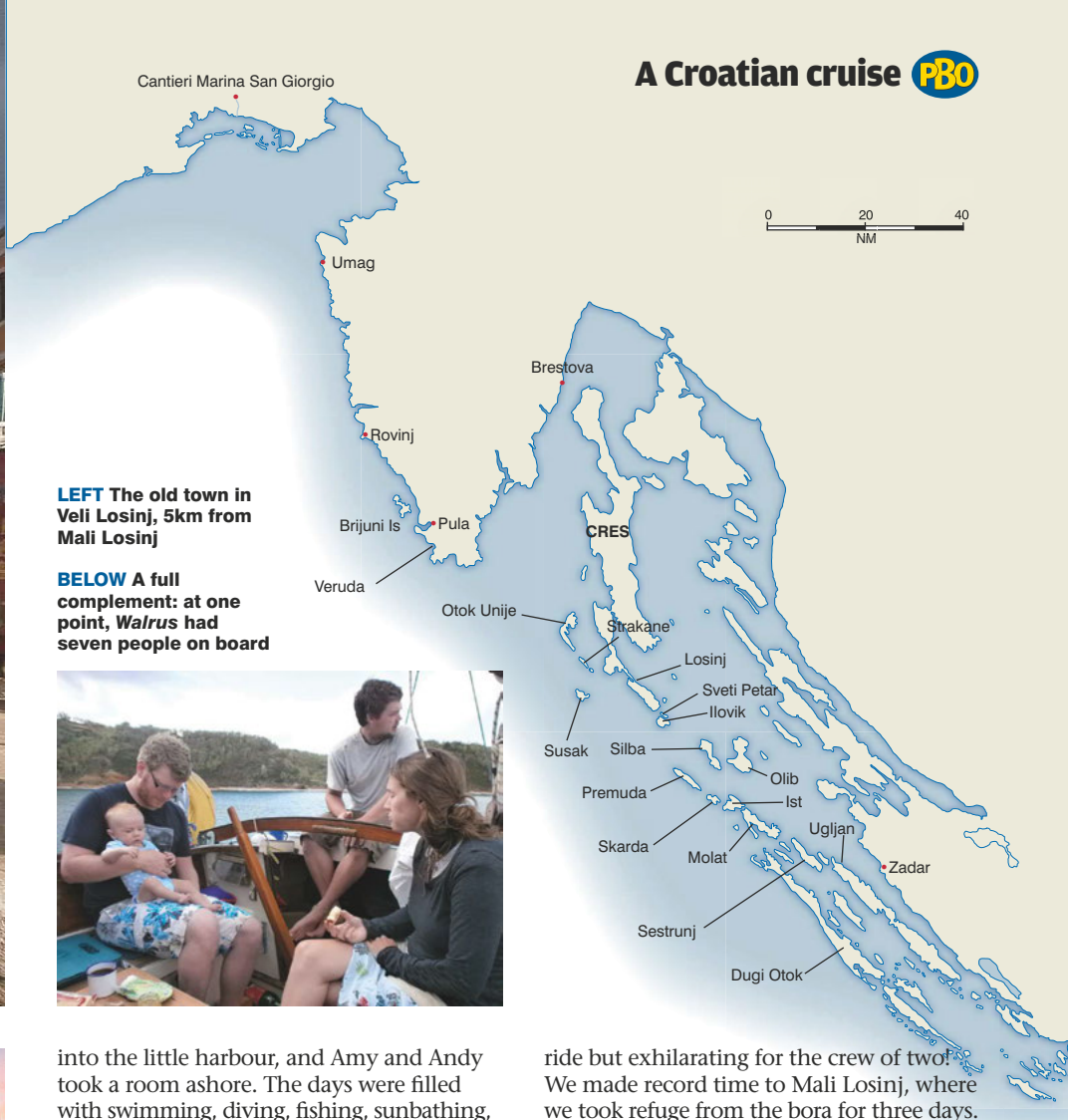
Waiting for a window

The wind eventually eased enough for us to set sail for Unije, a very choppy passage made possible by staying close to the lee shore of Strakane. We spent two wonderful days tied up alongside the quay in Unije harbour, moving off the quay twice daily to allow the supply ship to dock. When we left, we hanked on the storm jib and fully reefed the main, which would be a test of the new mainsail, *Walrus* and her crew.

Thankfully, we all came through with flying colours, and only three big waves broke into the cockpit. Once in the lee of the Istrian peninsula, everything magically went calm again, although it was still windy.

We spent two days taking in the amazing architecture in Pula, the jewel in the crown being the impressive amphitheatre. We then set sail towards the Brijuni Islands, as disappointing from the east as they were when viewed from the west on the way down. After a lovely sail hugging the coastline we arrived at the historic town and harbour of Rovinj, with its sun-shaded cafes hugging the cliffs. The highlight was climbing to the top of the St Euphemia church bell tower, high on the hill dominating the Rovinj peninsula.

With a favourable wind, *Walrus* creamed further north to our exit port, Umag. The next morning, after customs clearing formalities, we motored back to the Italian coast and entered the Laguna Di Marano, having to be aware for the first time in nearly six weeks of the depth of water under the keels.



Got a question? Email pbo@timeinc.com

Here's just a selection of the latest questions from PBO readers. Email or write to the address on page 5 and our experts will answer your queries

ENGINES

Despoiled by contaminated fuel

Q For 18 months I have owned a 41-year-old Fisher 30, fitted with a Volvo Penta 2003T diesel engine. While I found the fuel prone to contamination, following storage before I bought the boat, I believed that I had eliminated 'diesel bug' through using the additive Marine 16 and keeping the tank topped up.

On a trip last year, the boat barely made it back to our home port when the engine conked out in the sea lock. I'd checked the filters and hadn't found water to be a problem, but on our return there was a large amount of water and emulsified fuel in the primary filter and bottom of the tank, and water had reached the secondary filter. I'm now draining the 50-gallon stainless steel tank. I usually use road diesel, and I suspect the red diesel I took on during this passage may have been contaminated with water, but cannot prove if this was the case. The seal on the fuel filler pipe cap is sound, and in any case there's too much water in the fuel for this to be the likely source. The air vent loops above the tank and then exits a few inches above the water line.

When I have emptied the tank, is there a method of cleaning it, perhaps using a chemical that can be poured in via the fuel filler pipe and then removed through the drain valve to remove all diesel bug residue?

Paul Flint
Windermere, Cumbria



The first four pints of 'fuel' to be drained from Paul Flint's diesel tank

PAT MANLEY REPLIES: Like you, I find it difficult to believe this contamination is from your fuel filler. This amount of water could have come from a long-term build-up of in-tank condensation or from taking on contaminated fuel. With your fuel vent point very close to the waterline, you could easily suck water into the tank when motor-sailing on the appropriate tack (with the vent under water) as fuel from the tank is used. I'd move the vent to a much higher point, as close to the boat's centreline as possible.

Road diesel and inland waterways diesel has a minimum biodiesel content of 5%, and probably more like 7%. Biodiesel is hygroscopic: it attracts water, so you're much more likely to get water in your fuel from condensation than you would from fuel with no bio content. This could have been the root cause of your

problem, made worse by taking on more contaminated fuel or sucking water in through the tank vent.

As far as fully cleaning the tank is concerned, you could use a commercial company such as Diesel Bugbusters (www.dieselbugbusters.co.uk). Alternatively, you could try cleaning the tank yourself with diesel fuel or paraffin once it is empty, filter it and recycle it until the tank is as clean as possible. As far as I know, there's no magic chemical.

If the debris at the bottom of the tank is rust, this could indicate that your tank is past its sell-by date – even stainless steel rusts at the welded seams. If the debris is a hydrocarbon sludge, then dosing with an enzyme treatment at each refuelling should keep that under control. Proper cleaning of the tank will not be cheap, so getting a new tank may be the best solution. One made of high-density polythene (HDPE) would be my preference.

As regards keeping your tank free of water, good housekeeping is the start of the process, and it seems to me that you are on top of this. If, as is usual, the fuel take-off from the tank is several centimetres above the bottom of the tank, there must have been a lot of water in there for it to have been drawn off and into the filter. If there is a drain cock rather than a stud in your tank sump, it should be no trouble sampling fuel when you refuel at an unfamiliar fuel supplier. Using a twin fuel filter system with a changeover valve is also a good safeguard.

RIGGING

Worm turns for the worse

Q The Tufnol worm wheel on my Sabre 27's mainsail roller reefing has several teeth missing. How can I carry out a repair, or should I source a replacement? Is there a similar system I could adapt?

Barry Hilton,
By email

MIKE COATES REPLIES: This reefing system works on a worm gear into which the reefing handle fits, which in turn engages into a Tufnol gear wheel connected to the boom. Failure of the item is usually due to the teeth on the cog breaking away from the cog's body: this can either be caused by trying to reef with too much load in the sail, or by the fitting itself seizing.

Unfortunately, spares are no longer available: you could have a new 'cog' made by a specialist gear cutting/engineering company (which no doubt would be very expensive for a one-off item), look for a similar replacement on eBay or scour the boatjumbles. Be wary, as a second-hand replacement could already have a similar problem.

Possibly the best long-term solution would be to upgrade the system to a more modern slab reefing system.

THE PBO EXPERTS

To ask a question email pbo@timeinc.com and include your address. Pictures are helpful



SEA SAFETY
Will Stephens is Staff Officer Operations (Coastal Safety) at the RNLI



INSURANCE
Simon Tonks has worked in marine insurance for over 18 years as a broker and insurer



CRUISING
Stuart Carruthers is the RYA Cruising Manager and has sailed extensively



SAILS
Ian Brown of the International OneSails loft group is an expert on sails



MASTS & RIGS
Mike Coates worked in the spar and rigging business for many years



SURVEY AND CORROSION
Colin Brown runs a marine survey and consultancy company, CB Marine Services



ELECTRICS
Paul Holland is chairman of the BMEA and MD of Energy Solutions (UK)



ENGINES
Pat Manley is a diesel engine course instructor and marine author

WOOD

Splitting the joint

Q I have a very old and sweet Trintella 1a. The mahogany plywood by the starboard porthole is starting to delaminate/split slightly, probably along a vertical joint. Is there a simple fix for this, ie just filling with epoxy? I don't want to cut out wood panels as I have zero carpentry skills.

*Kieran O'Dwyer
By email*



A scarf joint between two sheets of plywood may be the cause of this split by the starboard porthole

RICHARD HARE REPLIES: It looks as though the split might be a scarf joint between two sheets of plywood: I can't think of any other reason why there would be a split diagonal to the face grain. The way the line wavers towards the bottom casts a shadow of doubt about this, though. You will be able to identify whether it is a scarf joint by looking to see if the split goes deeper than the surface veneer. It will also show on the inside surface. Alternatively, check to see if there isn't an abnormal pressure point along the inside surface that needs to be rectified.

Either way, the ideal solution would be to reconstruct the cabin side with a new piece of plywood.

Do it all in one length, assuming 2,440mm (8ft) is long enough. However, I detect that you'd prefer a simpler DIY approach, which will cost a lot less! I suggest a well-bonded cover strip. It won't be as smart as a reconstruction but it is 'belt and braces' and, so long as you don't use too skimpy a piece of wood, it will be accepted as such.

You could source a piece of suitable tropical hardwood, 6-12mm thick – iroko, teak or



Kieran O'Dwyer's Trintella 1a

mahogany – and cut it wide enough to cover the fissure, top to bottom, side to side. A shipwright should be able to help you out with a suitable offcut, and he may even machine it up for you. Cut the wood at an angle along the top to ensure rainwater drains away and isn't trapped. Prepare the area by sanding back to bright wood but no more to avoid damaging the surface veneer. Wipe clean with acetone or cellulose spirit ('paint thinners' from an auto parts shop)

and then bond on the cover strip. Thickened epoxy adhesive will probably have enough 'grab' to hold the cover strip in place if it is supported along its base while the glue cures. A means of holding it will be needed if it's unsupported: a couple of brass pins perhaps, one above the other. Remove the excess with a putty knife. Once cured, the pinheads can be countersunk and the holes filled with brown putty. They're so small you'll hardly notice them.

ELECTRONICS

Best test at sea

Q I have a Moonraker 36 Soft rider motor-cruiser fitted with a VDO Logic Autopilot that, when put into navigation mode – ie autopilot – is continually 'hunting' between port and starboard. After setting a new course it will respond to the new heading, but instead of settling it keeps on 'hunting'. I have not taken it out of the harbour to test it yet as it keeps

kicking slightly from port to starboard and will not stop. Should it settle? I have adjusted the rudder response, damping and delay to no avail. Any ideas?

*Brian Rogers
Biggin Hill, Kent*



◀ Brian's VDO Logic Autopilot is 'hunting' between port and starboard

CHRIS ELLERY REPLIES: I don't see this make of pilot very often, so simply kicking to port and starboard while alongside could well be normal. The only way to

test it is to do a proper sea trial and then adjust any parameters according to the setting-up instructions in the manual. About

the only test you can do alongside if the system does not have a compass readout is to hold something magnetic close to the autopilot compass and then withdraw it. By doing this you should be able to make it wheel in one direction and then back. Some of the older Raymarine pilots would kick a little alongside, and the VDO may be the same. I suggest you try it at sea.

50 of the most frequently asked boating questions are answered by our experts on the PBO website. Visit www.pbo.co.uk



GAS FITTINGS
Peter Spreadborough, of Southampton Calor Gas Centre, has 20 years in the industry



PAINT AND ANTIFOULING
Richard Jerram is former UK technical manager of International Paint



YACHT DESIGN
Andrew Blyth is a naval architect with interest in stability and buoyancy



TOILETS AND PLUMBING
Gary Sutcliffe of Lee Sanitation knows about holding tanks, toilets and plumbing



TRAILER-SAILING
Colin Haines is a design engineer who has trailer-sailed for 25 years



ELECTRONICS
Chris Ellery of Greenham-Regis Electronics is a former Merchant Navy officer



BOATBUILDING
Tony Davies has been building and repairing wooden, GRP and steel boats for 40 years



WOOD
Richard Hare is a wood technologist and long-time wooden-boat owner

CORROSION

Identifying metals

Q When it comes to skin fittings, how can I confidently tell the difference between brass, DZR brass and bronze? I have a skin fitting – quite yellow in colour and with a very smooth finish – but don't know what it's made of. When I asked the opinion of a company claiming to be able to test these components they quoted me in the region of £50 for the service. I decided that the sensible thing to do would be to buy a bronze equivalent for comparison from a reputable source.

The bronze fitting I received is more of a brownish yellow and the interior has an unmachined, fairly rough feel to its surface, so I suspect my original fitting is either brass or DZR brass.

So now I can identify bronze, but how do I tell if something is brass or DZR? Is there an easy 'kitchen sink' way to carry out such a test at home?

Stelios Odantzis
By email



One is bronze, one is brass – the bronze one is on the right

VYV COX REPLIES: Confusingly, Americans call bronze, a copper-tin alloy, 'red brass'. The reason for this, as you have discovered, is that bronze is distinctly red by comparison with the 60/40 brass used for plumbing fittings. There is a useful guide to copper alloy colours at www.metalreference.com/Forms_Copper_Alloy.html, although of course it can never be a perfect guide as computer screen settings can distort the colours.

Unfortunately, DZR (dezincification-resistant) and 60/40 brass are so similar in composition that there is no colour difference. I have experimented

with several household chemicals to identify one that might affect one of the brasses more than the other, but was unsuccessful. The only way to tell them apart is that DZR ball valves will be marked with the CR (corrosion-resistant) logo and will normally be unplated. Skin fittings and hose tails in DZR have been extremely rare in the past – most are bronze – but some manufacturers are beginning to make them, in which case they're also marked CR.

■ **Vyv Cox holds qualifications in metallurgy and mechanical engineering, and is an occasional contributor to PBO.**

CRUISING

Greek VAT unearthed

Q I manage a syndicate boat (a 1989 Gib'Sea 372) which has spent its life in Greece, but is currently registered in the UK. It was originally sold to a Greek charter company which, after six years, sold it on the open market to the current syndicate. I'd like to know where we stand re proof of VAT status: Greece was not in the EU when the yacht was originally sold, so VAT was not applicable. Does this mean the yacht remains exempt, or could we be hit for VAT on the current value?

Also, I plan to replace the old VHF with a DSC VHF with built-in GPS. However, I'm somewhat confused about enabling the DSC function. Will it function without first programming in an MMSI number? As the yacht lives in Greece, from whom should I get an MMSI number? Would it be OFCOM in the UK, where it is registered, or a Greek equivalent? I have a basic VHF licence: would this need to be upgraded before I could get an MMSI number?

Frank Boydell
By email

STUART CARRUTHERS

REPLIES: Greece has been in the EU since 1981, and as far as I am aware introduced its VAT regime in 1987. It is possible that the Greek charter company originally bought the vessel and claimed the VAT back: if so, the VAT should have been paid when it was bought by the syndicate. If the yacht was sold as VAT-paid then there should be a VAT invoice with its paperwork. The syndicate would do well to get local advice: they should not assume that the yacht remains tax-exempt, which would not be the case in the UK.

Regarding your DSC query, the syndicate need a ship's radio licence for the boat, and at least one member of each crew must hold a ship's VHF DSC operator licence. The ship's radio licence can be applied for online from OFCOM. If the current call sign is input into the form it will allow the applicant to request an MMSI number for input into the new radio set. If it is a new licence application, OFCOM will issue a call sign and MMSI number. Do not worry about going online and filling in the form: you can amend and/or cancel a request for a ship's licence at any time.



YACHT DESIGN

Rudders – to the manner barn

Q I often read in various yachting magazines that a boat might have a 'barn door' rudder. I get the impression that this is said in a derogatory way. What is wrong with a 'barn door' rudder? It could perhaps create more drag, but this would surely be minimal? When I built my Golant Gaffer I looked at the rudder plans, decided it was far too small and made one with a further 3in on the trailing edge, so she is very manoeuvrable and answers even the slightest order from the tiller. Is this the reason I have not experienced the problems of going astern that are associated with long-keelers?

Tony Wain-Smith, by email

ANDREW BLYTH REPLIES:

You ask what is wrong with a seemingly oversized rudder. As you say, the extra drag is in most cases very modest. Too small means that the turning ability will be impaired, especially when sailing where the rudder is located close behind a fixed-pitch propeller. However, what is always affected is the

amount of force required on the tiller or wheel.

When going ahead, the centre-of-pressure (CP) of such rudders moves from about 10% of the chord abaft the leading edge at small helm angles to about 30% at about 35° helm. This is fine when going ahead, provided the tiller length (or gearing) is sufficient that the

force that has to be applied by the helmsman is acceptable. A 'barn door' rudder will require a slightly longer tiller to result in the same force being applied.

However, when going astern the CP is now much closer to the normal trailing edge. Boats with higher aspect ratio rudders usually steer astern nicely without too much variation in required force, but with a 'barn door' rudder the movement of CP has a much bigger effect on the tiller force required and can result in the helmsman being overpowered if the boat speed is too high, resulting in an uncontrollable tight turn. If your boat handles well both ahead and astern, then there is no problem!

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Adapting an extractor

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John Calton shows how to extract a water pump impeller without skinning your knuckles

Several years ago, after hurting my arm and knuckles trying to extract the impeller from the 135hp Perkins engine in my Aquastar 27, I decided that there must be a simpler way of completing the job. I'd been shown the 'two-screwdriver method' by a mechanic, but I felt this could damage the inner surface of the water pump housing that was used as a fulcrum by the levering screwdrivers.

I then saw a cheap battery terminal extractor on a stall in a market, which I bought for £2.99. This I adapted into my own impeller extractor: I shortened the handle and added a tapered nut that would bear on the arms of the extractor, forcing their jaws to grab the impeller. I also filed down the arms so the extractor fitted into the pump housing without scoring its inner surfaces, and sharpened the jaws so they'd grip the rubber impeller firmly.

These adaptations may seem crude and amateurish, but they worked well and ensured injury-free limbs when I changed the impeller on a 260hp Yanmar that powered our new Nimbus 310. I photographed my modifications and sent the results to Jabsco,

hoping that they might improve on my working model. Some time later, the postman staggered up our drive with a heavy parcel containing six working models from the Jabsco R&D department.

Soon after, I changed boats again,

this time to a Beneteau Antares 980 with a pair of Volvo 225i engines. These also have water pumps in an awkward, confined position, requiring a small, strong and easy-to-use impeller extractor.

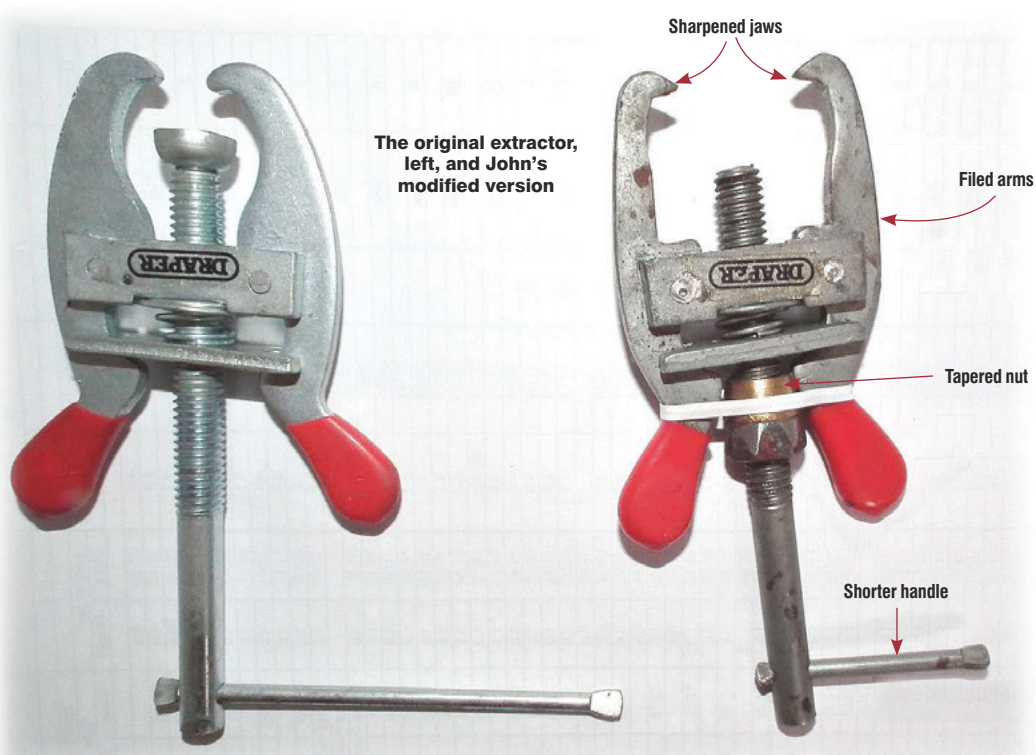
Buoyed with the knowledge that

I had just such a tool, I embarked upon the task of replacing the impellers, using the appropriate Jabsco model (see below, far left).

However, there wasn't enough room to turn the fixed handle of the new tool, and the arms wouldn't grab the impeller because there wasn't room for the adjusting screws to be tightened either.

So it was back to the boat with one of the other models – much more compact, but with the disadvantage that the knurled nut which tightens the arms is virtually impossible to turn in a confined space. However, I did eventually manage to complete the job, albeit with grazed knuckles.

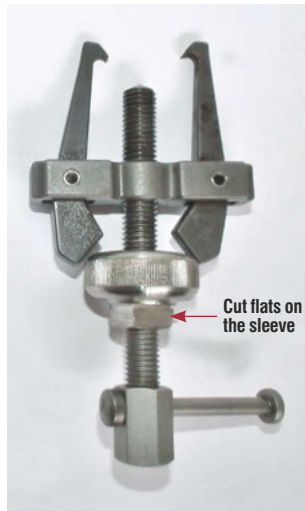
Back home, I had a brainwave: why not turn the knurled nut around and cut four flats on the redundant sleeve? There's just room on the boat to turn the flats with a 17mm open-ended spanner – success once again! Replacement of impellers is now a pleasure, not a pain.



One version of the Jabsco puller was still too wide



The successful Jabsco version, left, and John's modded version



Navel tricks



Derek Fairley makes a bung with the aid of some silicone rubber and a Choc Dips pot

COST
£15.50

My 85-year-old Hillyard gaff cutter *Waif* has a manual windlass, with the anchor chain led below through a 2in navel pipe in her foredeck.

The anchor locker is in the bow, directly below the pipe, but there is no external drain, so water entering through the pipe goes to the bilge. In anything more than very moderate seas, a great deal of seawater can (and does!) enter by this route. I needed a way to plug the navel pipe when at sea, but without removing the anchor chain. My solution was to make a split silicone rubber bung, as follows.

Firstly, I needed a suitable plastic mould, and a KP Choc Dips pot was perfect. I cut the base out of the pot, sealed the top with duct tape and suspended an offcut of 10mm anchor chain inside the inverted mould. After adjusting the chain height so that it just touched the duct tape, I filled the mould with Polycraft high-strength silicone rubber, supplied by MB Fibreglass in Belfast. After curing it for 24 hours, I removed the mould to reveal a tapered rubber bung formed around the chain. Using a craft knife, I carefully split the bung into two halves and cut 1cm from the larger end. The finished split bung fits snugly around the chain and into the navel pipe, giving a virtually watertight seal that can be easily removed for anchoring.

■ **Total cost of the project was 50p for the mould (with free Choc Dips) and £15 for the silicone rubber.**



The finished bung, fitted into the navel pipe

Readers' Tips



SAFE FROM CHAFE

For chafe protectors to be effective, they must be secured to the rope. If the rope moves inside the protector, this causes friction and that causes chafe – and the nylon fibres may also melt. If the protector is properly secured it will move with the rope as it stretches, so the protector will thus be abraded and not the rope. It's important to routinely check the chafe protectors and swap them out as needed.

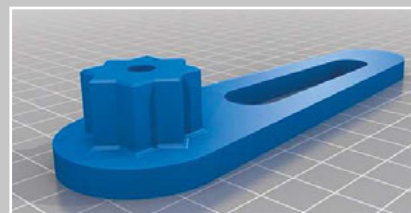
We make chafe protectors out of slit tubing and incorporate lanyards at either end. These can then be slid over the rope before they're lashed to it.

Capt. Alex Blackwell

HOW YOU CAN HANDLE IT YOURSELF

Winch handles tend to damage the soft material on filler caps and also provide too much leverage, which causes over-tightening. With the current proliferation of 3D printers, one option is to make your own short plastic wrenches. These are easy to draw, but I have placed my design online at www.thingiverse.com/thing:650507

Henry Lupton



A HANDY METHOD OF MIXING EPOXY



To avoid wasting expensive epoxy, either by mixing too much or by getting the 5:1 ratio wrong, I used two empty hand-wash bottles. These come with a dispensing pump, and are easily cleaned out with hot water. Filling one with epoxy resin and partly filling the other with hardener, it's easy to pump five shots of resin and one of hardener into a small container – which could be made by cutting round an empty hand-wash bottle. The materials don't pump very well when cold, so keep them indoors in the winter. When sanding wood, I collect the sanding dust in a jar and use it as a thickener for mixed epoxy, to make my own wood filler.

Jonathan Humphreys

OUTBOARD LADDERETTE

The company I work for was disposing of a stepladder with worn rubber treads, which had been withdrawn on health and safety grounds. I was only allowed to take it with the proviso that the ladder was cut up: 'Okay,' I said, but let me cut it.' I measured its top hinge section to use as a support for my outboard when it is stored in my garage, then cut up the ladder and disposed of the sawn-off legs. I kept the top section, which can be folded so it lays flat for easy storage, but which forms the basis for a frame to which I can clamp the outboard when opened. Using bolts and locknuts I fixed a piece of wood to the ladder and, to save time winding the outboard clamps, thickened it using an offcut from an old fascia board. The top step can easily accommodate a bucket to catch the small oil drips I get with my second-hand outboard. The cost? Nil, as I had the fascia board and bolts to hand.

Michael Allen



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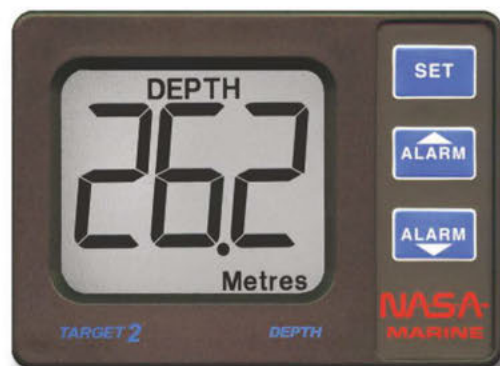
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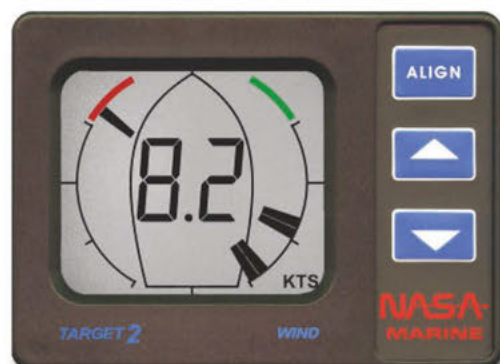
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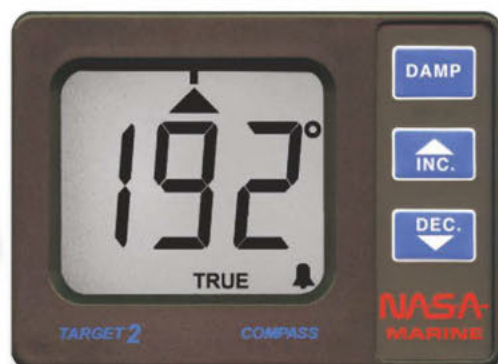
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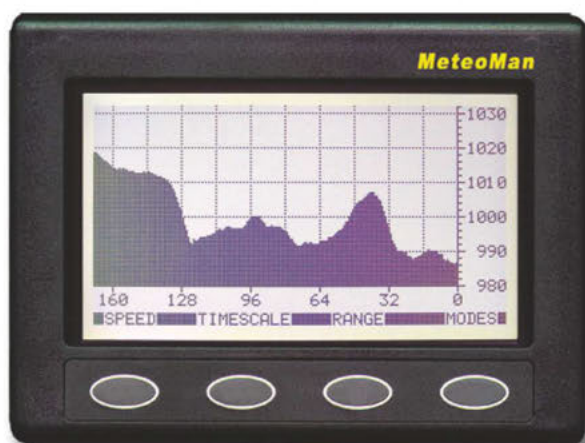


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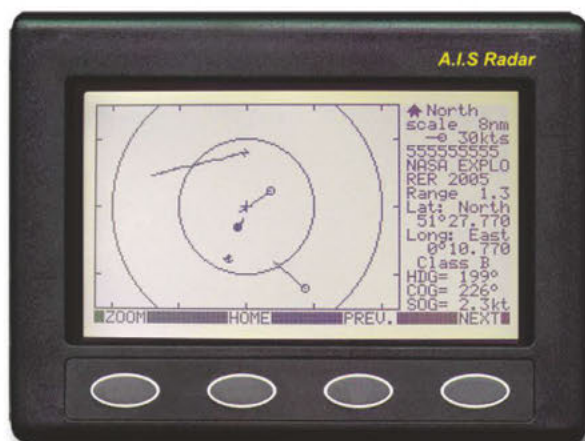
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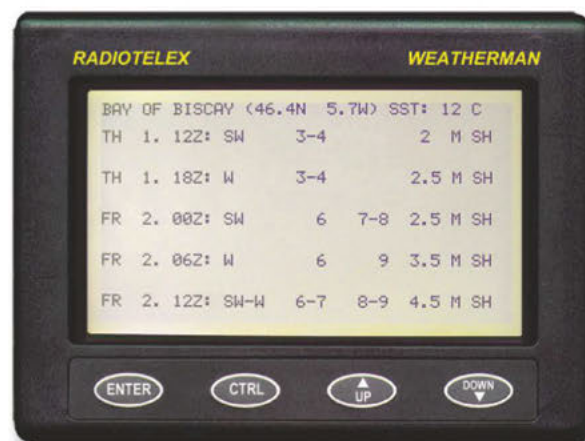
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Round the Island by *Magic*

David Lewin explains the processes involved in preparing his Red Fox *Red Magic* to participate in the legendary Round the Island Race



David, centre right, and his crew with *Red Magic*, his 6m (20ft) Red Fox

What's hot, black and steaming and comes out of Cowes? Well, the Isle of Wight ferry might now be red and white, but on the morning of the summer solstice, just under 1,600 boats and approximately 16,000 competitors took to the Solent for the annual Island Sailing Club's JP Morgan Asset Management Round the Island Race.

Reputed to be the world's largest yacht race, and enacted on an iconic course around the Isle of Wight, the 50-mile event is just about the ultimate day-sailing experience, and if you have a boat over 5.5m (18ft) weighing no less than 770kg you can take part. This means you can mix it with all the sailing 'greats' and be (briefly!) alongside some pretty fancy machinery, which gives you tremendous bragging rights back in the bar. The atmosphere on the day is always unforgettable.

However, all this brings me back to a point much earlier in the season – in fact, before the season began. In order to use a boat sufficiently and keep it up to scratch, one should always have a sailing project in mind. Having owned *Red Magic*, our 6m (20ft) Red Fox trailer-sailer, for around eight years now, all our projects have been about cruising and how we could trail the boat to cruising grounds we could not otherwise have reached during an average holiday. We knew the boat worked as a cruiser, but I've always been impressed with her performance under sail – so there was only one thing for it last season, which was to go racing with

the ultimate goal of taking part in the Round the Island Race.

This meant we would need to make some modifications to the boat to meet the ISAF Category 4 Offshore Special Regulations, as it is deemed an offshore race, and would also have to measure her to obtain an ISC local handicap. In addition, we entered our local Wednesday evening club races to get in a bit of practice before the main event! This didn't mean we were going to strip the boat out and fit racing headfoils or a boltrope luff to the mainsail: *Red Magic* is still very much used for cruising, with a roller jib and a mainsail that falls between lazy jacks into a 'stack-pack', but we did want to upgrade the safety aspects and concentrate a little more on the boat's sailing performance.

Entering the race

Once we'd selected the crew and established that they were prepared to take a few days off to take part, it was time to start the entering process – I say 'process' because we don't have an IRC racing certificate and hadn't done the RTIR before, so we would need a local Island Sailing Club handicap for which we would need to supply certain measurements. We also wanted competition to keep us on our toes, so we contacted the Red Fox Owners' Association and were delighted to learn that another three Red Foxes were coming out and taking us on. We now had a race within a race: however onerous our handicap would be against the other boats, we would have our own level-rating first-over-the-line competition.

The ISC's race organisation is simply superb. If there is anything you want to know or are not sure about, it'll be somewhere on the website or in the myriad of YouTube videos that have been produced about the event. As they suggest, the best course of action is to print off the entry form and work through all the required information before going back online to effect the entry. I think it took us

around two months to get it all together, but that was during the course of the spring fit-out.

Measuring for the handicap

Our boat's dimensions were easily obtained from the original brochure and double-checked against others on the internet. When it comes to weighing a boat, normal procedure would be to take it to the travel hoist or crane, have practically everything moveable taken out onto the dock, weigh the boat using a load cell then have certain items replaced and weigh it again – a laborious and expensive operation. However, one of the joys of owning a trailer-sailer is that it can be towed to the local weighbridge, where you can obtain an official-looking printout with the gross weight supplied for £15. We did this immediately after taking off the winter covers, when pretty much everything was still off the boat: so after deducting the weight of the trailer (a standard RM trailer with known weight) we had the empty weight of the boat.

The empty weight is defined as 'the weight of the boat in dry condition, fully rigged with all standing rigging and spars (including spinnaker pole) including all permanent fixtures and fittings, batteries,

A trailer-sailer can be towed to the local weighbridge

main engine installation or outboard engine aboard in stowed position, but excluding all loose gear'. The sailing displacement, which is the other required weight, is described as 'the empty weight with the addition of such items as running rigging, sails, anchors, chains, warps and loose gear, together with adequate fuel and water which puts the boat in racing trim', so it was just a matter of setting up a spreadsheet and entering the weight (via the digital bathroom scales) of everything as we put it back on board.

We could have measured the sails ourselves, but thought it fairer and more accurate to have it done by a sailmaker – the ISC asks for the source of this data – so while buying a new

ABOUT THE AUTHOR



David Lewin has been involved with boating and the boating industry since the early 1970s. He is past president of the British

Marine Federation, a former member of the RYA council and lives with his wife Melanie aboard a houseboat in Burnham-on-Crouch, Essex.

Red Magic taking part in the Round the Island race



The trailer needs as much care as the sailer...

perfectly good for cruising and replacing it wasn't in the budget: therefore it lives on, as does the spinnaker which is of a similar vintage. If you are prepared to fly a spinnaker, there's no point in owning a cruising 'chute: the performance doesn't even come close once off the wind.

However, there's a strong case for a flat-cut close-reacher, flown from the bow or a short bowsprit, using the spinnaker halyard. With the small jib on the Red Fox there was a gap in our armoury on a close reach with the wind still forward of the beam. I suppose this is what some people call a Code 0 – and we had to have one! It's a great sail, a bit limited in its use but an absolute game-changer when the wind direction is right. We fly it from a short bowsprit made by strapping the spinnaker pole down onto a 'saddle' on the bow.

Smoothing the bottom

Once we'd worked on what was going to make us faster, we looked at what would make us slower and therefore took a bit of extra time to smooth the bottom, making sure there were no barnacles left from last season and giving her two good coats of antifouling. The lifting rudder and bilge boards don't need antifouling as we always raise them when at rest, but they got a good polish. It's also important to ensure the outboard can be raised clear of the water on both tacks to avoid unnecessary drag, but RTIR rules state that the engine must be removed from the transom if it sticks out beyond the rudder. Luckily we have a lightweight 5hp 2-stroke motor that we laid on an old piece of carpet on the cabin sole.

We contemplated removing the Plastimo jib furler and the mainsail 'stack-pack' but that would make it more difficult to cruise or sail single-handedly, so they stayed as before but we furled the mainsail cover under the boom. Another compromise was the regulation that the racing sail number (issued by and free to RYA members) should be made visible on the side of the boat, so we sewed them to the existing dodgers, keeping us snug in the cockpit.

Sailing Scenes

asymmetric close-reacher, we dropped off all the sails and asked for a favour! Along with our personal details, mobile numbers and emergency contacts, we now had everything we needed, so we paid £90 online by credit card to enter the race (and made an optional donation to the official charity).

As previously stated, we wanted to optimise *Red Magic's* sailing performance, so once rigged we look a long hard look at everything. The Red Fox 200 has a relatively large mainsail compared to the blade jib, so it's really the 'engine' at the heart of the boat. It's a Dacron cruising sail with four ordinary battens and two reef points, but it incorporates as large a roach as practicable without full-length battens and cars and is in its third season. It sets well, even with a reef, but we made it more adjustable by lengthening the outhaul, which hitherto went to a jammer at the gooseneck, taking it back to the cockpit via turning blocks and organisers. That way we could alter the foot tension for different wind strengths and points of sail.

The Z-Spars mast is held up by a Bergstrom-type rig with severely swept back spreaders and no backstay. This is mostly good news, obviating a backstay and any type of 'flicker' to overcome the roach on the mainsail. However, once off the wind in any type of blow, the loadings on the swept back shrouds are enormous.

At last year's Red Fox Rally, a member showed us how he used his topping lift, unclipped from the boom end and fixed to the stern as a running backstay, so we have now done the same, extending the topping lift so it comes back to a winch and jammer in the cockpit. Shortly thereafter, we took part in a Wednesday night race where there was a recorded gust of 42 knots. We were certainly knocked down, but without the backstay I'm sure we would have damaged the rig. We also replaced the damaged nylon sheaves in the boom to make reefing easier and added an extra external spinnaker halyard with a jam-cleat on the mast.

The jib must be more than eight years old as it came with the boat, but it's



Meeting the new safety regulations

RTIR boats must comply with the new ISAF category 4 safety regulations, so we printed them off from the internet and highlighted the areas we would need to address. The first few pages cover the general scantlings and build of the boat including structural features, stability and fixed equipment. Most boats meet these specifications if built to the Recreational Craft Directive, but a couple caught us out.

Red Magic was built in 1992, when it was quite common for guardrails to be plastic-covered: they also finished at the forward end of the cockpit and lashed through the stanchion post eye to webbing straps the length of the cockpit. This system has now been outlawed for good reason: no one knows what's going on with the wire within its plastic sheath, and the lashing and stitching on the webbing is subject to UV rot. We therefore replaced all the guardrails with 4mm 1x19 uncoated stainless steel wire, with no more than a 100mm (4in) lashing at the aft quarter.

The second structural modification was the companionway hatch, which 'shall be fitted with a strong securing arrangement operable from the exterior and interior including when the yacht is inverted'. Furthermore, '(the washboards) shall have a blocking device capable of being retained in position with

the hatch open or shut' and 'secured to the yacht (eg by lanyard) for the duration of the race, to prevent their being lost overboard'.

After looking at various rather clunky solutions including a heavy and expensive stainless 'door handle' which meant we could no longer stow the boards safely in their purpose-built rack, we hit on a simpler and cheaper solution using some cord, saddles, hooks and cleats. Once threaded together, all the boards were joined and the hatch could be hooked to it on the inside or outside and simply cleated off.

The right equipment

Being under 7m long, *Red Fox* 200s were only ever built with a simple all-round white navigation light at the masthead which is not really adequate these days, so we bought a cheap set of battery-powered nav lights, fixing them to brackets that could be easily taped to the pulpit and pushpit.

Thereafter, it was just a case of ensuring we had all the right equipment aboard (see panel)

At this point the regulations start talking about stormsails and dayglo trysails, far beyond the capability of a 20ft Category C trailer-sailer, so we agreed that if any wind above Force 5 was forecast we certainly wouldn't be out in it! As regards lifejackets, we are convinced of the benefit of wearing them at all times – with a crotch strap (importantly), a fitted sprayhood and an



Once threaded together, all the boards were joined and the hatch could be hooked to it on the inside or outside and simply cleated off



We replaced all the guardrails with 4mm 1x19 uncoated stainless steel wire, with no more than a 100mm (4in) lashing at the aft quarter

automatic light. All lifejackets should be to ISO 12402-3 (150N class) or higher and professionally serviced at the required intervals.

Foul-weather gear

The last recommendation was for a good set of foul-weather gear and warm underclothing – it went without saying, but I hoped we wouldn't be needing it in June. As it transpired, we didn't need it: the 2014 race was perhaps the hottest, slowest and most

frustrating on record. But I'm getting ahead of myself.

Our boat trailer had been serviced for the trip to the West Country and *Red Magic* had been prepared and lashed down the weekend before, so all we had to do was hitch up and trail her down the M3, picking up our third crew member en route to Hamble Point Marina where we'd booked a slot on the slipway.

However, as we turned onto the M25, I noticed a small wobble on one of the trailer wheels. We were in four lanes of traffic with another joining from the left, so I pressed gingerly on. By the time we got to the Queen Elizabeth Bridge the wheel bearing had completely collapsed, and the heat generated from steel on steel was setting the hub grease on fire! We had no option but to drive very slowly over the bridge, finally arriving at a lay-by just after the tollbooth.

After a three-hour wait for a suitable flatbed recovery truck, *Red Magic* and her trailer were winched aboard and eventually delivered to the marina. The moral is that the 'trailer' part of the trailer-sailer needs to be looked after just as much as the sailer!

SAFETY REGULATION CHECKLIST

- Handheld VHF
- Spare light bulbs
- Watertight container (into which we put the flares, torch, a knife and some water. As we frequently take the boat on cross-Channel ferries and own a laser flare and a DSC VHF, we resented having to buy a new set of pyrotechnics that we couldn't take abroad and that we couldn't dispose of once time-expired, so we borrowed these for the race.)
- Radio 'capable of receiving weather bulletins'
- Softwood plugs – we only have two seacocks aboard
- Two fire extinguishers and a fire blanket
- Anchor(s)
- Waterproof high-powered torch with spares
- First aid kit
- Foghorn
- Radar reflector
- Charts (corrected and up to date!)
- Safety equipment location chart: easy to make and laminate
- Tools and spares
- Lifebuoy, heaving line and danbuoy (home-made with plastic pipe, closed cell pipe insulation and lead counterweight)
- Yacht's name on the lifebuoy, etc
- Cockpit knife
- Bolt croppers: we carry a large pair of wire cutters, but borrowed these

The race

Come race day, we left the dock with plenty of time as we wanted to see some of the bigger boats start and weren't due over the line until 0810, the last start. Once outside the breakwater we raised the sails, but with the ebb well set in, the breeze was not strong enough to hold us back from the line – and if we were going to be over at the start there would be no coming back!

So there we were at the 10-minute gun (all engines have to be off and stowed by the five-minute gun), motoring east away from the line as fast as possible, as we decided it would be better to start late than take a penalty.

We eventually crossed the line in the middle of our class of 62 starters. The western Solent was pretty well a dead beat to windward: we consoled ourselves with the fact there are rarely any days with no wind, and once round the Needles at least we would be running 'downhill'.

How wrong we were! Struggling around the Needles just as the tide was turning, we found ourselves going to windward again towards St Catherine's Point. Thankfully, whatever breeze there was freed into the south-west, and having tacked offshore we had a reasonable reach



Struggling around the Needles as the tide was turning, we found ourselves going to windward

to St Cat's where we all parked up again, passing the headland sideways with no steerage way at all.

We finally got the spinnaker up, limply, to Bembridge Ledge buoy, but as the sun went down so did any hopes of a breeze, and there was no chance of getting to the finish off Cowes before the 10pm time limit. So, we gracefully retired – and finally opened a beer!

It was disappointing not to finish, but the race is still about the most fun you can have in a sailboat. We also took heart from the fact that our nearest Red Fox rival retired somewhere near St Catherine's Point.

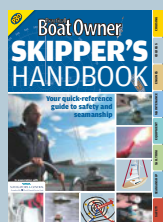
Racing improves the breed

Whatever the outcome of our weekend on the Solent, this year's racing has transformed my sailing and enjoyment of the boat. I've learnt so much about how she handles and how to make her go better, and I'm much more confident about manoeuvring under sail in close quarters. We regularly sail alongside, pick up a mooring or leave the dock under sail, so the boat is now not only going faster but my seamanship skills have improved too. We might have to go back and do it again this year.

■ Enter the JP Morgan Asset Management Round the Island Race via www.roundtheisland.org.uk

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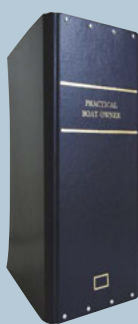
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HMS *Victory*

The battle to save Nelson's flagship

On the 250th anniversary of the launch of HMS *Victory*, Richard Johnstone-Bryden looks at the processes involved in restoring and preserving this iconic and symbolic figurehead of the Royal Navy

For over two centuries, HMS *Victory* has symbolised the fighting ethos and values of the Royal Navy: yet as the 250th anniversary of her launch approaches, she is at the centre of a new battle which has been billed as the last opportunity to save significant elements of her original structure. Despite *Victory's* scale and historical importance, the principles that form the basis for the latest phase in her long-term preservation provide an effective framework for anyone who wants to restore a wooden boat.

The current restoration project has been triggered by the consequences of sitting in a dry dock for 90 years and commenced following her transfer to the HMS *Victory* Preservation Trust on 29 March 2012. The new organisation was established to resolve the dilemma of how *Victory's* long-term preservation should be managed and funded.

Even though *Victory* continued to perform an important ceremonial role as the Second Sea Lord's flagship, it was becoming increasingly difficult for the Royal Navy to justify the ongoing funding of a historic ship which had been open to the public since 1928, when operational warships were being paid off to save money. This situation,

coupled with the results of a survey that confirmed *Victory* required another extensive restoration, forced the Royal Navy to search for an organisation that would be prepared to accept the responsibility of preserving Britain's most iconic warship. Ideally, the navy wanted to put in place an arrangement whereby the Ministry of Defence could relinquish its ongoing financial responsibility while enabling *Victory* to remain in commission in an enhanced ceremonial role as the First Sea Lord's flagship.

Fix *Victory*!

Fortunately, the solution was to be found just a stone's throw away from *Victory's* dry dock in the form of the National Museum of the Royal Navy (NMRN). It agreed to take on the burden of caring for her via a separate charitable trust, providing a realistic endowment fund could be secured to cover her long-term maintenance costs. Initial indications suggested that the work might cost around £50million. Sir Donald Gosling, a generous supporter of naval causes for many years, stepped forward to award a capital grant of £25million via the Gosling Foundation towards these projected costs, which was matched by the Ministry of Defence as part of its transfer agreement with the trust.

On completion of the handover, a new conservation team led by Andrew Baines of the NMRN took charge of *Victory's* maintenance. Their brief was simple – fix *Victory*! This of course was easier said than done. Although *Victory's* history has been extensively documented in terms of where she went, the battles she participated in and those who served in her, there was a surprising lack of information about specific elements of the ship itself. In some quarters she was unfairly referred to as 'HMS MDF', on the basis that she had undergone so many refits that virtually none of the original timber survived.

Such assessments were incredibly harsh, yet in the spring of 2012 no one could provide an accurate answer about the age of the ship's individual components, as Andrew Baines explains. 'We actually knew very little. We knew that she leaked through the deck and the hull, which had caused rot to develop in a number of places. We knew that for about 40 years she had been falling in on herself at about ½cm per year, and that she was bulging at the waterline at a similar rate.'

'We also knew that she was falling backwards and slightly rolling over in dock. However, we didn't know why or have any specific pieces of work in mind with a view to going forward.'

1759, 23 July:
Victory's keel is
laid in Chatham
Dockyard

1765, 7 May:
Victory is launched
and placed
in reserve

1778, 13 April:
Commissioned
for service in the
American War of
Independence
under Admiral
Augustus Keppel

1778, 27 July:
Fights in the
inconclusive first
Battle of Ushant

1780:
Victory is fitted with
copper sheathing
during a refit
in Portsmouth
Dockyard

1781, 12 December:
Captures a convoy
of troop ships
during the second
Battle of Ushant

HMS *Victory* timeline



Therefore, the conservation team decided to start with a blank sheet and follow the sequential process developed by National Historic Ships UK (NHS UK) for the conservation of historic ships. NHS UK is a government-funded independent organisation which gives objective advice to the UK's governments, local authorities, funding bodies and the historic ships sector on all matters relating to historic vessels within the UK. Its approach consists of a series of 'conservation gateways', starting with the stabilisation of the ship in question.

In the case of *Victory*, this meant keeping rain out. Thus, for the first two years, *Victory's* conservation team concentrated on dealing with the countless leaks by caulking the deck and repainting the hull.

These may sound like minor tasks, but when you are dealing with a 3,500-ton wooden ship they represent a

considerable undertaking. The completion of these jobs in 2014 enabled the conservation team to alter their description of the ship's condition from '*Victory* leaks' to 'a specific part of *Victory* leaks'. In parallel with this work, the museum commissioned a number of surveys to fulfil the second objective of improving the museum's understanding of the ship as a historical object and the factors causing her distortion.

Race mark survey

The race mark survey recorded the positions of all the race marks which had been cut into individual pieces of wood within the ship. These marks were made by shipwrights to record the date on which a piece of timber arrived in a dockyard. When used in conjunction with the dates of the ship's major refits, the marks enable the conservation team

to make an informed decision about when each piece of wood was fitted. This in turn helps to generate a fairly accurate picture about the extent of the repairs carried out during each refit and how much original woodwork remains in *Victory*.

Another survey involved an analysis of the ship's paint. This provided the team with an accurate indication of the various colours that were used at different points in the ship's life, which has led to some surprises. For example, the lower gun deck was painted duck egg blue between 1803 and 1805, while the mustard yellow applied to the hull is actually the wrong shade. When used in conjunction with the results of the race mark survey, the paint analysis is helping to firm up the timings of when particular pieces of timber were fitted, on the basis that the bottom layer of paint is likely to be the



1793-1794:
Flagship of the
Mediterranean Fleet
under Admiral
Lord Hood

1797, 14 February:
Flagship of Admiral
Sir John Jervis at
the Battle of Cape
St Vincent

1798-1799:
Fitted out as a
hospital ship

1800-1803:
Great repair
at Chatham

1803-1805:
Flagship of Admiral
Nelson in the
Mediterranean

1805, 21 October:
Fights in the Battle
of Trafalgar as Lord
Nelson's flagship

original undercoat. This assumption provides a rather effective benchmark by which to judge the age of the adjoining pieces of timber. If the neighbouring pieces of wood share the same bottom layer of paint, then it is reasonably safe to say that they were fitted at the same time. If not, the difference in the number of paint layers will confirm whether the adjoining pieces of wood were fitted earlier or later.

A dendrochronology (tree dating) survey was also conducted to identify the origins of particular pieces of timber. For example, was all the oak grown in England? If so, whereabouts? In addition to answering these questions, the survey provided further evidence of when specific repairs were carried out, thereby enhancing the team's understanding of *Victory* as an object.

The final element of their investigations focused on why the ship was moving and falling in on itself. To create an accurate record of the ship's current condition, the team enlisted the services of the Wiltshire-based Downland Partnership to use state-of-the-art laser mapping techniques to create a digital 3D model showing every last millimetre of the ship. To achieve this, their scientists used a Leica HDS6000 scanner which records an incredible 50,000 measurements per second. A total of 850 scans, lasting 3½ minutes each, were carried out to record a staggering 89.25billion measurements.

Not surprisingly, it took three months to convert this information into a series of 3D models that could be used by structural engineers to gain an accurate insight into the way the ship was moving and how it could be stopped.

It is unrealistic to expect that all of the ship's individual pieces of timber can be simply moved back into their original position, so the conservation team has had to set itself the more realistic target of stabilising *Victory* and taking the necessary steps to prevent any further movement. This in turn has led to an interesting discovery. The team had expected the surveys to highlight the replacement of missing fixings and rotten wood as the highest priorities. However, the results confirmed that *Victory's* hull is heavily over-engineered, which enables it to cope with a certain amount of rotten wood and missing fixtures, yet it cannot withstand the strains imposed by an insufficient level of support on a long-



Painstaking restoration work on HMS *Victory* is estimated to continue for another 20 years



Re-caulking the decks is helping to rectify a number of troublesome leaks



Areas of rot had developed in a number of places. According to conservation team leader Andrew Baines, '*Victory* had been falling in on herself at about ½cm per year'



term basis. The structural engineers therefore concluded that *Victory's* distortion had been primarily caused by an inadequate level of support since she was dry-docked in 1922. Thus, before the main restoration work can commence, the conservation team must devise a more effective alternative to the combination of sturdy steel supports along the turn of the bilge and the concrete plinth on which the keel has sat for the past 93 years.

Historical importance

While these practical initiatives took place, the museum also conducted a review to establish precisely why *Victory* is of such historical importance. The value of answering this question should not be underestimated because it can have a major impact on how the ship is presented, which in turn may dictate the scope of the restoration itself.

In recent years, there has been a shift away from returning historic ships to how they appeared at a specific moment in time. While this approach was entirely

understandable, it inevitably led to the removal of items that represented the latter stages of a ship's career, thereby diminishing its overall heritage value.

In the case of *Victory*, it was decided when she entered dry dock in 1922 that she should be returned to how she appeared during the Battle of Trafalgar. This led to the removal of several ungainly features that had been added since 1805, thereby destroying some of the evidence associated with a large slice of the ship's history.

Although there is no appetite to reverse this situation on board *Victory*, the museum will in future protect those remaining items on board that were fitted after the great repair that was carried out in Chatham Dockyard between 1800 and 1803. Previously, if an item that had been fitted after this period required a repair or replacement, it would have been removed on the grounds that it wasn't present at the time of Trafalgar. The need for this change in approach is underlined by the NMRN's work to assess her overall

1806-1808:
Repaired at
Chatham Dockyard

1808-1812:
Flagship of
Admiral Sir James
Saumarez in the
Baltic

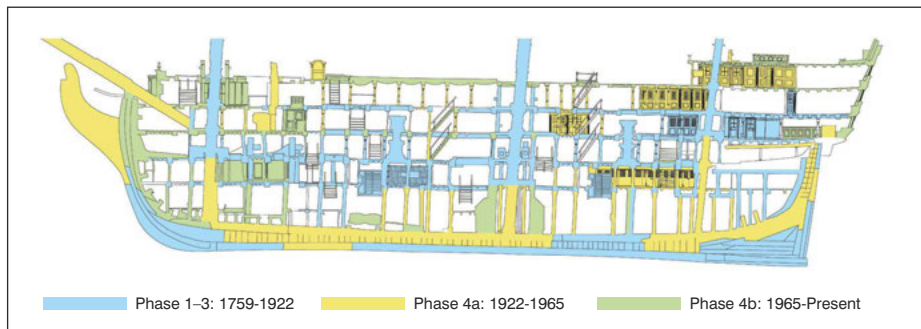
1812, 7 November:
Enters Portsmouth
Harbour for the last
time to conclude
her seagoing career

1814-1816:
Victory undergoes
an extensive refit

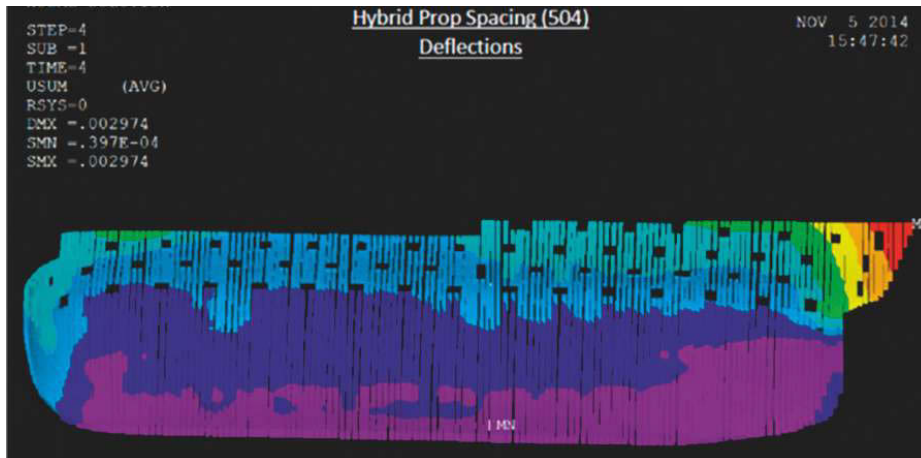
1824-1830:
Flagship of the
Port Admiral in
Portsmouth

1869-1891:
Tender to HMS
Duke of Wellington

HMS *Victory* timeline



A colour-coded key to the distribution of material within the ship dating from different eras



State-of-the-art laser mapping techniques have been deployed to create an accurate picture of HMS Victory's current condition and construct a digital 3D model

significance. Not surprisingly, her involvement in the Battle of Trafalgar as Lord Nelson's flagship topped the list of *Victory's* historical merits. This fact alone has always helped tip the balance whenever she faced the real prospect of being broken up.

However, it is not the only reason why she deserves to be described as a significant ship. Her historical attributes include being the sole surviving First Rate; a prime example of Georgian shipbuilding techniques, and in particular, the craftsmanship of Chatham's shipwrights; the First Sea Lord's flagship; and the world's oldest warship in commission. Each one of these distinctions highlights a different aspect of her long career.

Having spent the last three years stabilising *Victory's* condition and undertaking physical and historic assessments of the ship, the NMRN is now turning its attention to drafting plans for the restoration itself. This challenge poses the museum with a difficult dilemma. On the one hand, it

needs to eliminate as many unknowns as possible, yet it does not want to take so long that the plans become irrelevant due to *Victory's* continued deterioration. Equally, its plans must have sufficient flexibility to enable the conservation team to respond to the inevitable unforeseen discoveries that are bound to come to light once the work begins.

Based on the results of its investigations, the museum's planning work will initially focus on the provision of sufficient support for the hull by building a new cradle that provides 140 points of support as opposed to the 20 offered by the existing arrangements. It is also evaluating what materials should be used for specific repairs such as the replacement of the outer hull planking and how the saturated internal structural components can be dried out without triggering further distortion of the hull. Resolving these issues and implementing the solutions will take time: at present, the museum predicts that the restoration work will last at least another 20 years.

Victory's birthplace

Victory's keel was laid down on 23 July 1759 within the shallow, timber-lined Old Single Dock in Chatham's Royal Dockyard. Six thousand oak trees were used over the next six years to create a First Rate capable of carrying 104 guns to a design by Sir Thomas Slade.

On 7 May 1765 she was floated out of the dock in which she had been built and laid up on the River Medway. She remained in Ordinary (reserve) for 13 years until she was commissioned for service in the American War of Independence. The Old Single Dock was subsequently rebuilt in stone and extended in the mid 19th century. Today, it is home to the last of the Royal Navy's wartime destroyers HMS *Cavalier*, which is one of the principal attractions at the Historic Dockyard, Chatham.



HMS *Cavalier*, last of the navy's wartime destroyers, at the Historic Dockyard

Further information

Tel 02392 727582, www.hms-victory.com



1903:
Rammed and severely damaged by HMS *Neptune*

1922:
Enters No2 Dry Dock for restoration under the guidance of the Society for Nautical Research*

1928:
Victory is opened to the public on completion of the restoration

1941, 10 March:
Damaged in bombing raid

2012, 29 March:
Custodianship transferred to the National Museum of the Royal Navy

2012, 10 October:
Victory becomes the flagship of the First Sea Lord

*the Society for Nautical Research had raised the funding for the work that could not be justified under the auspices of her ongoing naval role.

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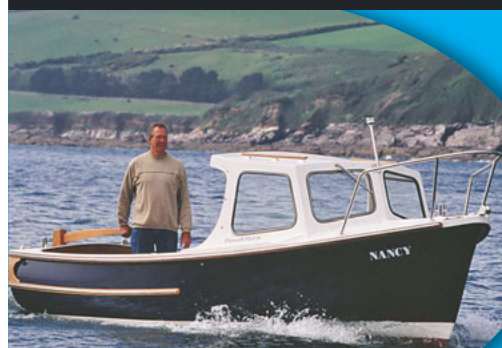


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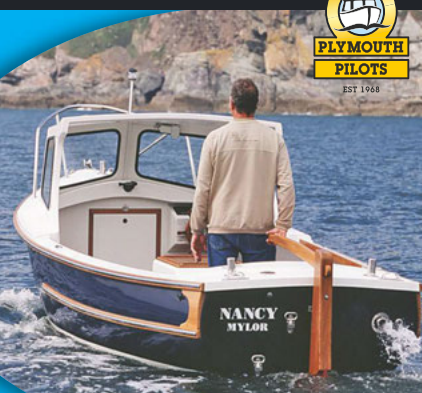
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Console yourself

David Berry shows how to construct an instrument console using Plastikard, teak veneer and some Gorilla Glue



When I wanted to make a small instrument console to hold two OLED displays and a few LEDs, I was faced with a problem. I needed to make it from material that was dimensionally stable over a wide temperature and humidity range, but thin enough to enable the display bezels to protrude: which meant using something only a couple of millimetres thick.

If I chose wood it would probably warp at that thickness, while metal would be difficult to cut and join. I

also wanted a teak finish, which would mean veneering the finished unit. Then I remembered a material I used when I was a mere boy of about 12, from which I made rolling stock for my model railway. By the time I was 14 I had discovered girls and they had no interest in branch line railway modelling, so Plastikard was consigned to my memory – until now.

Slater's Plastikard is a polystyrene material, available in lovely, flat sheets, that can be cut easily, solvent-welded to make strong joints and finished in any

number of ways (see <https://slatersplastikard.com>). Slater's sell it in white or black and in a range of thicknesses: the thinner ones can be rolled or bent, which I only mention in case you want to make a model locomotive boiler to pass the time at anchor.

Preliminary issues

There were a number of issues I needed to investigate before racing onwards:

1. What cleaning solvent would be safe?
2. Would I be able to stick real teak veneer to polystyrene and, if so,

what glue would I use?

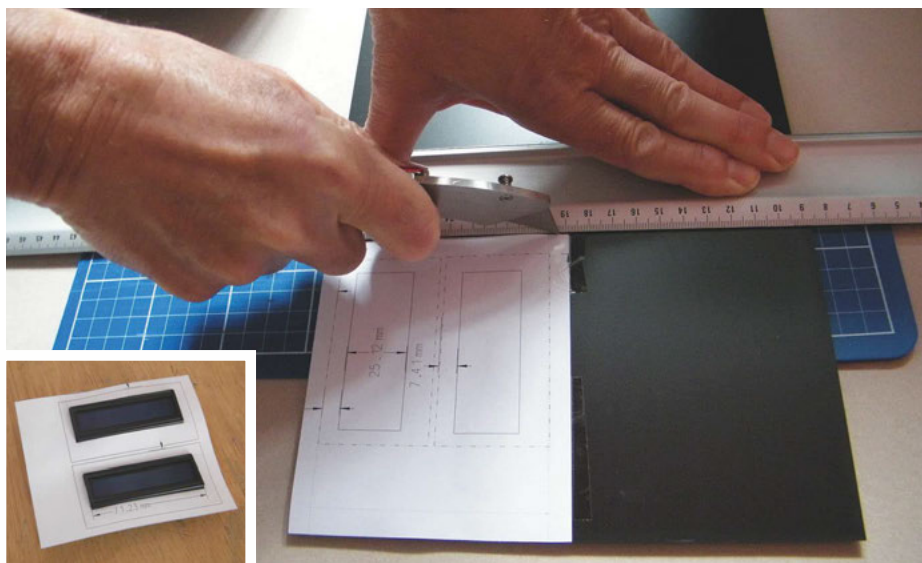
3. Would any glue suggested for veneering soften the plastic?

4. Once the teak was in place, would I be able to follow my standard finishing technique of Ronseal and beeswax without affecting either the plastic substrate or whatever glue I used to stick the veneer?

To address these issues I made up a test piece of Plastikard and veneer using a urethane adhesive called Gorilla Glue (www.gorillaglu.com), ash veneer, meths as a cleaner, Ronseal and beeswax.



1 You can buy a pack of Plastikard sheet directly from Slater's or a model shop. To reinforce the corners I used 8mm-square Plastruct, which is also polystyrene, and the teak veneer is from a supplier of parquetry wood and comes in 0.6mm-thin sheet. To solvent-weld the plastic I used a loaded solvent glue, again from the model shop, called Citadel Plastic Glue Thick supplied by Games Workshop (www.games-workshop.com), and to attach the teak I used Gorilla Glue.



2 The console is designed to house two OLED displays, a couple of LED indicators and a switch. Design techniques are no different from those you might use for thin ply. The first thing to do was lay everything out on a paper pattern so that the clearances for the corner reinforcement and the sequence of assembling the box could be worked into the scheme. Then I attached the paper pattern to a sheet of 2mm Plastikard and cut the plastic to size. Slater's website has a handy guide to using the sheet

and suggests cutting it in the same way as you might cut glass – scoring then snapping. I found that scoring the 2mm sheet up to 10 times with a Stanley knife was necessary to guarantee a clean break (later using a No10 scalpel). To cut the rectangular apertures for the displays I drilled corner holes then scored the straight sides on both faces of the sheet until I was able to work the discard material free to leave the empty rectangle. Holes for the LEDs and switch were simply drilled to size.

ABOUT THE AUTHOR



Regular PBO contributor
David Berry is a retired engineer with degrees in mechanical engineering and computer science.

He worked for a defence contractor designing equipment for naval vessels.



3 When I had finished the front face I cut the four sides, which were simple rectangles sized so that the front face would fit inside the box made by the sides. The next step was to veneer the sides. Gorilla Glue is a single-part urethane adhesive which uses atmospheric moisture to cure it in the same way as DIY expanding urethane foam filler does: and like foam filler, the glue expands a lot. To stop the expansion simply blowing the veneer off the plastic substrate, pressure has to be applied for the two hours that the glue takes to cure. So to apply pressure and keep everything flat and in contact I used these two large, smooth tiles. To stop the aggressive glue bonding everything to the tiles I first treated them with a generous coat of beeswax as a release agent.



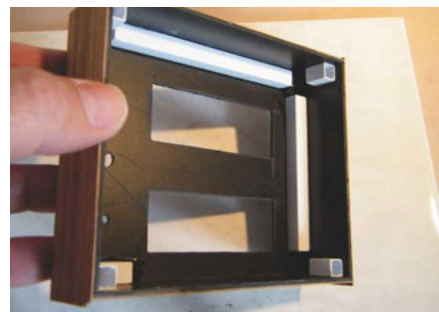
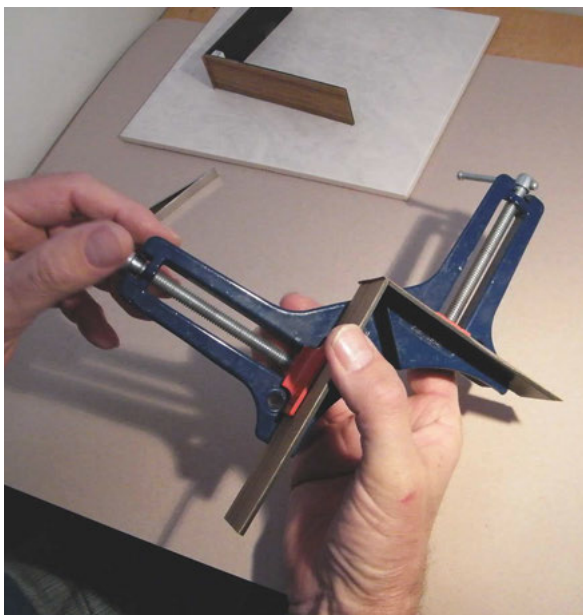
4 I then cleaned both faces of the joint with meths, which is fine as a cleaner for polystyrene – but if you want to use something else try it first on a scrap piece, as some solvents will mark or damage the plastic. Plastikard has a smooth surface, so I lightly abraded it to improve the chemical bond before applying the glue. The Gorilla Glue instructions recommend dampening the surface to be glued so as to provide enough moisture to cure the glue, but when I tried this on my test sample the damp veneer expanded and resulted in a bent component. So, after this I just relied on

whatever moisture was in the atmosphere being able to penetrate the very thin veneer, and it worked well. The best tool for applying the glue is a tile grout spreader. I dropped a blob of glue onto the centre of each plastic side then spread it thinly in each direction. It wets the surface well, so it's easy to use.

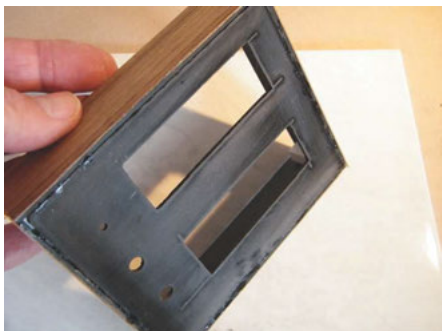
I put the four side pieces, glued onto one piece of veneer, between the waxed tiles and weighed them down with the *Oxford English Dictionary*, *The Complete Works of Shakespeare*, *Grey's Anatomy* and a suitable rock. I knew those books would find a use one day!

5 After two hours I separated the tiles and trimmed around the plastic sides with a number 10 scalpel, leaving excess veneer on the corners to hide the exposed edges. I tidied up the cut edges by rubbing them against a second-cut file held horizontally in a vice: the plastic and veneer are soft so this must be done with care, but it produces an excellent edge.

The perfect tool for assembling the corners to ensure they were flat and square was a Draper picture frame clamp. I applied the solvent glue to one side of the joint and rubbed the two halves together briefly to melt some of the surface polystyrene for the solvent weld. This is where the loaded thick glue is useful since it allows a bit of time to manipulate the parts.



6 The front face fitted inside the side pieces, and here again the hard flat surface of the tile was ideal for lining everything up. I ran a bead of glue around the edge of the face then dropped the already assembled sides down onto it, holding everything down against the tile until the solvent evaporated. I cut the white Plastruct strips to provide additional support in all the corners of the completed box. In this shot you can see the overlapping veneer on the ends which hide the exposed edges of the sides before being trimmed.



7 Now it was time to veneer the console's front face...



8 And at this juncture, a reasonably generous blob of Gorilla Glue...



9 ...was spread around thinly with the tile grout spreader...



10 ...then the whole thing was dropped onto a waxed tile with another tile placed on top and weighted down.



11 Here I've trimmed the edges and I'm now working quietly outwards until the veneer is trimmed back to the size of the opening in the Plastikard. A touch here and there of 300-grit abrasive paper is also useful, although too heavy a hand will result in the 0.6mm veneer disappearing very quickly.



12 The finished article, ready for wiring. For small inboard items I like to apply a coat or two of Ronseal matt indoor varnish rubbed in with a cloth, then administer a good quality beeswax with fine-grade wire wool. The result is a semi-matt smooth polished surface. **PBO**

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The banks are to blame

Then-novice sailor Steve Potbury learns several salutary lessons when an increasingly testing day-sail is curtailed by a sandbank



My first day-sail in my first cruising boat was rather a mixed bag of luck and emotions. In my defence, I was still a total beginner and had only owned my 1964 Westerly 25 *Macavity* for around eight months. For six of these winter months she had undergone extensive and intensive DIY restoration at the North Devon Yacht Club yard at Instow.

After browsing the excellent *Bristol Channel Cruising Guide* by Peter Cumberlidge, I decided to sail upriver on a spring tide towards Barnstaple, anchor out from a suitable public house, have lunch and then return on the falling tide: can you already

sense my naïve optimism? I thought this would make a nice relaxing introduction to my new world of exploration by sail.

The chosen weekend arrived: the forecast was for a glorious couple of days with a fair bit of breeze to worry those poor fools who didn't have a nice sheltered estuary to play in. My good friend Mr B is usually up for such occasions, having miraculously survived several others over the years: a quick call confirmed that he was already making his way up to North Devon to meet me on the seafront at 0900. Result: everything was falling into place nicely.

Now, I had owned, patched up and sailed a couple of old dinghies, and had completed my RYA Dayskipper course and enjoyed every minute of it. However, my time spent actually under sail in tidal waters was minimal: virtually non-existent on this boat. This was the idea, though: I bought a cheap old boat of tank-like build because I knew I had a lot of mistakes to make over the next few years... and so it proved to be.

In due course Mr B arrived and we fired up the little Johnson 4, making our way out to *Macavity* who looked a treat in her shiny, crab-free paintwork. As forecast, a nice breeze was building from behind us, ready to whisk us off to our watering-hole. I

was under no illusions as to my ability to handle my new vessel with other craft in close proximity, so I fired up the ancient Mercury outboard that accompanied the original sale and motored out into clearer waters. Mr B cracked open a can, the sun shone, I raised the tattered old bag of a mainsail and bore away upriver.

Striking landscape

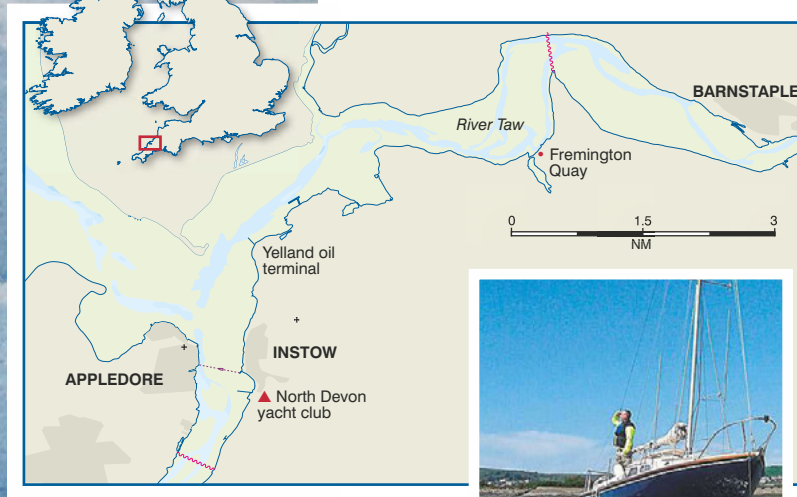
Once moving well, I felt that some more sail would be a good thing: the big genoa should be ideal. Up it went, and in a second we were storming across the estuary towards the entrance to the Taw, with the wind and tide helping us very nicely. The wind must have picked up over the ensuing hour, but we didn't notice it as we were running away from it so hard. It probably wasn't even very much wind either, but with my lack of experience it later proved too much for me.

The River Taw is very beautiful: we were happy to be propelled in graceful silence through such a striking landscape. It is however a bit shallow in places. Also, we had no chart at that time and there are no navigation buoys. How we made it upstream (using only the depth sounder) without hitting a rock I'll never know, but the high spring tide combined with our

ABOUT THE AUTHOR



Steve Potbury is an electrician based in east Devon. He took up sailing after being forced to quit surfing due to a shoulder injury and has been restoring his old Westerly 25 for the past four years. He keeps an account of his progress on his website, www.shoestringsailing.com



Sitting high and dry on the very sandbank that barred our escape...



though the ebb had set in fairly well already.

We scrambled down to the now much lower dinghy: the water was disappearing like Neptune had pulled the plug out, and I was alarmed to see how many bits of dry land were poking up through it. So, up with the full main and genoa: she heeled over and hurtled off on a beam reach towards Fremington Quay at around 5.5 knots.

What would happen, I wondered, when we reached the rapidly approaching quay and had to turn right directly into this wind?

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No control

As soon as we cleared the shelter of a narrow stretch of river and its tree-lined banks, we were hit by a blast of westerly wind. This made my already over-canvassed boat lie down and turn sharply away from the direction we wanted to go,

heading for the quay instead. We had no control at this point: I suspect the weather keel was completely out of the water and our rudder was utterly ineffective. I had no idea how to rectify the situation: I had to get some sail down, but we were now running at ridiculous speed straight for the quay with a lot of wind behind us.

It was then that I saw the rocks, not quite in time, and watched helplessly as they shot beneath the bows. I gave up on trying to go anywhere except back where we had come from. Amazingly,

nothing crunched, and despite still going like a train we missed the quay (now lined with spectators) and shot out into clear water again, using our momentum to push the genoa-clad bows up into the wind. We dropped all sail into a pile in the water, threw the anchor at a previously unseen sandbank dead ahead, waved back at the onlookers rolling about on the quay, and sat down for a think.

At this point Mr B was doubting my hitherto unquestioned mastery of the sea,

and I was doubting whether we would make it back to our mooring in one piece. 'Why don't we forget the sails and just motor back to Instow?' suggested my loyal crew: so in a blue cloud of full-throttle two-stroke smoke we charged off into the teeth of the ferocious Force 6 (or whatever it was), only to have our bows immediately blown around towards Fremington Quay once more. We just missed that huge rock (again) and ended up where we started. Balls! Anchor down again: cue more hilarious quips from bloodthirsty onlookers.

We eventually worked out that if we hoisted a bit of mainsail and sheeted it in really tight, we could tack upwind under motor and make slow progress down the narrow, shallow channel towards Instow. This worked for roughly 25 minutes before we struck something that spun us around and wedged us sideways in front of several million gallons of rapidly exiting estuary water. My little boat strained against the pressure of water banking up against her, pushing her over to a scarily steep angle. At any moment I expected a keel to snap off or a river-borne tree trunk to ram through the hull. Mr B wrote down his last wishes.

Finally, it was all over. We were left sitting high and dry on the thing that had barred our escape - nothing more sinister than a large sandbank. Dejected, we laid out both anchors and looked around. We couldn't walk off as we were in the middle of the river, which was ebbing hard on both sides. Killing a bit more time until the ebb eased, we made a cup of tea and loaded our gear into the inflatable. It took another hour to make it as far as the Taw's old oil terminal, where we hauled the dinghy onto the dunes and hid the outboard up a drain.

We walked back to Instow along the beach and made the local RNLI aware of our poor 'abandoned' boat. I had to take the following day off work to drive back up with help to recover her. Mr B didn't come out sailing with me again for over a year.

LESSONS LEARNED

1 We had far too much sail up, especially at the front, to have any hope of beating back down such a narrow channel from the pub.

2 We left it too late to return and had too much flow of water to keep control under sail alone, unless we had been cunning and turned around to face upriver with only a tiny jib to control her descent on the tide.

3 Having no chart was inexcusable and asking for trouble.

4 I made the classic mistake of thinking the wind was weaker than it was on account of us being carried quickly away from it by the tide on our way upriver.

*Send us your boating experience story and if it's published you'll receive the original Dick Everitt-signed watercolour which is printed with the article. You'll find PBO's contact details on page 5.



meagre 3ft draught helped considerably.

Later we found ourselves amongst a few dinghy sailors and canoeists, all having a blast in the perfect conditions. As we progressed further upstream past the historic but derelict quayside of Fremington, there were fewer signs of leisure craft or indeed, weekend life of any sort. The river was getting narrower and high tide was nearly upon us: time to stop, I decided.

We had no problems with dropping the sails or letting go the anchor: neither procedure had been performed more than a couple of times to date, so we were proud of our textbook arrival. I had even performed a tide height calculation based on the depth shown by my echo sounder to make sure we could still get away after our pub jaunt. All was rosy as we paddled to the northern edge of the river where we could see a cycle path carrying a few jolly souls to a large pub. It was lunchtime and we were hungry, and we had a bit of a wait for our meal. By the time we'd eaten I was getting a tad twitchy about the time, and the river looked as

We were running at ridiculous speed straight for the quay

Laura Hodgetts reports on the latest marine products

OverBoard ultra-light waterproof duffel bag



David Harding

How do you keep your kit dry on a wet boat? Well, putting it in a waterproof bag is

one way of increasing your chances. Even if you're just heading across the river in your tender, one powerboat wash can be enough to give anything in ordinary boating bags a thorough soaking.

As a marine photographer who spends a lot of time bouncing around in RIBs I take precautions to avoid drowning expensive cameras, but everything else used to get distinctly soggy until I started using dry-bags. Overboard's Ultra-Light Waterproof Duffel has a capacity of 50lt, and is about 25in long by 12in wide and 10in high. This is a highly practical piece of kit for boaters. It's a handy size and, if you want to tempt fate on a fine day, you can leave it open for easy access to what's inside. When – or preferably before – the spray starts flying, roll the top over and secure the Velcro strip and the snap-buckles at each end. Then the contents should stay dry even if the bag floats away across the bay, though multiple D-rings and a carabiner hook encourage you to secure it to something solid.

Small items can fit in a front-access pocket with a waterproof zip and there's also an external mesh pocket for things that don't mind getting wet. It has a pair of webbing handles and a removable padded shoulder strap.

■ www.over-board.co.uk

Verdict

Apart from the closure system, the principal differences to ordinary holdalls are that it's made from a lightweight waterproof thermoplastic polyurethane (TPU) with welded seams and it doesn't have multiple compartments, a stiffened base or reinforcement at the corners. TPU is said to be tough, durable and extremely green – even when it's red. Or you really can have it in green if you prefer. For use in the locker-room, or if you're confident that your bag is going to encounter little more than the occasional splash, you might as well stick to an ordinary holdall. Otherwise, one of these could save a lot of expensive and inconvenient sogginess. It costs £89.99.

David Harding

NASA Clipper Wireless Wind System

No more wires up the mast with Nasa's Clipper Wireless Wind System, which consists of a solar-powered masthead unit, a base receiver and a display. The base unit, powered by the vessel's 12V supply, receives wind speed and direction data from the masthead transmitter and sends it to any compatible NMEA display unit. The masthead transmitter requires only occasional bright daylight falling on the solar panel to top up its internal battery, and will operate for 2,000 hours without further solar charging when the battery is fully charged. Weighing just 190g, the Clipper wireless mast unit and data box has an RRP of £349.20, but is available for less on chandlery websites.

■ www.nasamarine.com



Vaavud wind meters

The redesigned Vaavud wind meter turns your smartphone into a hi-tech meteorological tool. With the Vaavud Sleipnir you can take accurate wind readings at wind speeds from 1-40 m/s, with a precision of +/- 4%, and measure the wind direction with a precision of +/- 10°. This is an improvement on the original Vaavud Mjolnir wind meter, which is still on the market and takes accurate wind readings at wind speeds from 2-20 m/s (up to 24 m/s on iPhone 5S and up to 48 m/s on some Android phones), with a precision of +/- 4%. Both meters come with a neoprene bag.

The Vaavud Sleipnir costs \$60 (£39) and works with the following devices: iPhone 4, 4S, 5, 5C, 5S, 6, 6Plus – iPad 2, 3rd and 4th generation Mini and Air – Samsung Galaxy S5, S4, S3, HTC One, Google Nexus 4 and 5, and Droid RAZR M. The Vaavud Mjolnir costs \$40 (£26) and works with the iPhone 4, 4S, 5, 5C, 5S, 6, 6Plus – iPad 2, 3rd and 4th generation Mini and Air – Samsung

Galaxy S4, S3, HTC One, Google Nexus 5 and many more devices.

■ www.vaavud.com

Echo water-based transducer antifouling

Marlin Yacht Paints has launched Echo, a water-based antifouling formulated and developed specifically for transducers of fishfinders and echo sounders. It is solvent-free and therefore meets the guidelines of the largest producers of transducers, which may be damaged by the solvents in conventional paints.

Echo does not contain any copper compound or other metallic pigment which would minimise electrical conductivity. It is also extremely low-volume in order to produce the thinnest possible layer.

Echo is promised to be very easy to apply: it does not require any primer and dries quickly. It is said to provide good antifouling properties and outstanding adhesion on any surface. It is available in black, and costs around £15 for a 70ml package.

■ www.marlinpaint.com





Belzona 1212 epoxy composite

This two-part surface-tolerant epoxy composite has been engineered specifically for in-situ application to wet, oil-contaminated and underwater surfaces. When ideal surface preparation of a metallic substrate isn't possible due to lack of time or resources, Belzona 1212 is promised to provide a durable repair that can reinstate equipment for years of service. Following a series of tests using surfaces contaminated with a selection of commonly encountered oils and fuels, Belzona 1212 demonstrated strong adhesion to non-grit-blasted surfaces. It is designed to be easy to mix and apply without specialist tools, and should be ideal for repair kits and emergency situations. Prices are available on enquiry only.

■ www.belzona.co.uk



Tecma Nano toilet

This ceramic macerator toilet, said to be the smallest on the market, fits the technology into a space of 295mm (11.6in) in height. The Nano's consolidated ECO smart flush is designed to consume less water and power. The toilet is self-contained and easy to install, and there's no need to replace seals or gaskets nor accommodate a vacuum pump. It costs \$699.99 (£464.46).

■ www.thetfordmarine.com

Easy Lift C25 Cruising Hoist

Easy Lift Marine has launched a new 'cruising' version of its Easy Lift Outboard Motor Hoist. The 95cm lifting arm length, 25% longer than the more compact Easy Lift Classic (featured in PBO May 2012), means it can lower engines of up to 25kg down onto the transom of an inflatable from larger yachts, where the deck height is up to 167cm/66in above the waterline. The longer reach is also useful for manoeuvring outboard motors onto the transoms of tenders with wider-than-average beams. The clamping system has also been redesigned to accommodate the increased torque created by the longer arm. No drilling or special tools are required for installation, and hardware has been upgraded in both the Cruising and Classic versions with stainless steel low-profile cleats replacing the earlier hardwood cleats, with snap shackles added as standard. The C25 Cruising Hoist is available from Easy Lift Marine at £149.95 including free UK delivery.

■ www.outboardhoist.co.uk



Zhik ZK Seaboots

Zhik's Seaboots have been developed for extreme weather protection and are promised to be extremely warm. A completely sealed neoprene and rubber upper provide 100% waterproof protection, while the ZK sole is designed to grip in wet and dry conditions. The waterproof gaiter features a perforated neoprene gusset for fast draining and a non-stretch drawcord at the opening. The inner lining combines merino and quick-drying polyester fibres for natural odour control, moisture management and warmth. The boots' upper and inner soles are developed to provide support while maintaining flexibility and dexterity, while the 8mm neoprene midsole provides thermal insulation. ZK Seaboots cost £219.

■ www.zhik.com



Index Side Entry cable glands

The Side Entry series plastic cable glands offer a solution for the installation of solar panels and side-mount navigation lights etc when a cable loop from a conventional top-entry gland is not appropriate. They are made from UV-stable glass-reinforced nylon and have an aperture range of 2-12mm. The range has passed independent dust and waterproof testing to IP68. Each unit is supplied with fitting instructions and A4 stainless steel fixings, and priced from £8.74.

■ www.piplers.co.uk



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Captain Tolley's Creeping Crack Cure

This penetrating glue has been attempting to find and fix leaks caused by hairline cracks for nearly 30 years.

It was invented by sailor and adventurer Peter Tolley after he experienced water dripping onto his chart table and bunk while crossing the Atlantic. He said: 'I realised that what I needed was a penetrating sealant. One that would follow the path of the water itself and solve the problem from the inside. At the

time, I was working at a research establishment and I posed this problem to the chemists. The result was Captain Tolley's Creeping Crack Cure.'

The product was launched at the Southampton Boat Show in 1986. The agile liquid glue is designed to penetrate deep inside fine cracks (under 0.6mm), finding its way to the origin of a leak by capillary action. Once the entire fissure is filled it sets to a firm, rubbery, waterproof and transparent seal, stopping future leaks. It can be safely applied to most materials, is water-based and non-toxic. Prices start from £6.49 for a 60ml bottle.

■ www.captaintolley.com



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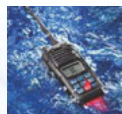
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9.75m	37.50m ²	£539
10.36m	42.00m ²	£599

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11.58m	51.90m ²	£749
12.19m	57.20m ²	£829
12.80m	62.80m ²	£899
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Some of the raid fleet tacking up the Carrick Roads

Big fun in small boats

If you come across a varied fleet of small dayboats and trailer-sailers rowing or sailing up a river, they might be on a raid. David Harding explains

Those of us whose childhood was largely spent messing around in dinghies and small boats never really grow out of them. There's a lot of truth in the adage that the pleasure derived from a boat is in inverse proportion to its size.

There's also a lot of truth in the notion that learning to row should come first. A good pair of oars will always get you home. I can still hear my father reprimanding me as a child on the Dart if I failed to use my back, keep my elbows in, feather my oars or, heaven forbid, ship my rowlocks when coming alongside. 'Windmilling', he called it, when people sat upright, stuck their elbows out and described splashy circles with the blades of their oars.

The *Swallows and Amazons* approach to boating has much to be said for it: never mind the Oppie-training sausage machine or the misplaced belief that you have to go straight into a



Organiser Peter Chesworth briefs the crews after a lunch-stop

'proper yacht' with a wheel, RCD Category A certification and every electronic aid under the sun in order to qualify as a sailor. If you start small and with the basics you can move on to other types of boating as you go through life, but the pleasure of messing around in small boats and the essential, elemental skills you

learned in those early days will never leave you. For some sailors in later life, such pleasures are an unexpected discovery.

If this strikes you as a bizarre, unfocused and outdated approach, you're probably not cut out for sail-and-oar raiding. If it strikes a chord, on the other hand, a raid might be just your thing.

What is a raid?

No hostilities are involved. The raid movement, initiated in France by Albacore-Dacmar, adopted the word for use in the context of what might be termed 'organised adventurous excursions in boats'. These usually involved a series of relatively short but potentially challenging hops around archipelagos or between islands. Competition was a fundamental element, as was promoting the region in conjunction with a government, tourist board or regional authority.

The boats varied, with RIBs and sports cats featuring in the early days. Sail-and-oar raiding in more sheltered waters came later and, not surprisingly, has inspired smaller-scale events in a broadly similar spirit. One such is Raid England, held last year in Falmouth's Carrick Roads.

Some competition is still involved but these raids are less hardcore than the originals and are geared around small trailable boats.

Some, like Swallow Boats' 6m (20ft) BayRaiders for example, have been designed for just this sort of use. Easy to trail, launch and recover, they sail well, row efficiently, carry outboards for use when necessary and don't mind a bit of weather. They have big cockpits and can be slept aboard.

While a BayRaider Expedition epitomises today's perfectly adapted raid boat, the diversity of craft is enormous. The smallest in Falmouth was George Trevelyan's 3m (10ft) Tideway, given to him when he was a child. George is one of the progenitors of the raid movement on this side of the English Channel. Also in Falmouth were a couple of 16ft Evolution Shearwaters (sailing canoes with leeboards and outriggers), a number of traditional-style open dayboats, Swallows of various descriptions making up around half the fleet, and a few others that particularly caught my attention. This last group included the Sailart 20, a modern trailer-sailer from Germany which proved that boats don't have to be trad to raid.

Joining the Sailart on my 'must sail' list was Colin Cumming's light and speedy *Pathfinder 3* and a pair of Kites designed by Andrew Wolstenholme, one of them being Andrew's own boat.

Who goes raiding?

Nearly 30 boats were entered for the raid, some sailed single-handed and many by couples. Then there was the Henley Whalers' 8.5m (28ft) New Bedford Whaler, *Molly*: slim, light, fiendishly fast in a straight line and with a crew of eight to man the oars.

Raiding attracts all sorts of people. In Falmouth were some well-known names in the marine industry, including Andrew Wolstenholme, Nick Peters – co-founder of RS Sailing and now wearing a Swallow hat – and the organiser, Peter Chesworth. I met a publisher of nautical books, a property manager based in France, a retired civil engineer turned boat designer, an events manager working with big-name bands in the music industry, and a couple of experienced cruising sailors who were selling the 38-footer they had kept in the Med. All were there to enjoy the sailing, socialising, friendly competition and simple living that raids are all about.

Go to...

www.raidengland.org

Boats on the raid...

BayRaider Expedition

The clue is in the name: these boats are made for raiding. Features that make them such good raiders, however, also appeal to those who, like the majority of owners, have no raiding plans but like what the BayRaider has to offer. In Falmouth we had examples of the original open-decked BayRaider, several BayRaider Expeditions (or BRE's, as their aficionados call them) and a BayCruiser 20 with her extra accommodation and fuller-sectioned hull in epoxy ply. The other two models share a slimmer hull in epoxy ply or, more often, round-bilge GRP.

I have tested all three for PBO, most recently the Expedition in November 2012. Despite this relatively recent experience I took the opportunity to sail one of the newest examples, entered for the raid by Nick and Kate Peters. It would refresh my memory and allow me to see how the BayRaider compared with the similarly-sized Kite, which I had hopped off only an hour before.

I also wanted to gauge the effects of the new jib arrangement. Originally the BayRaider came with a small jib set on a semi-balanced boom, which I didn't particularly like because it resulted in lack of luff tension and a wide sheeting



Nick and Kate Peters' boat represents the racier approach: spinnaker set to hoist and jib tacked to the bowsprit



Oars at the ready: in true raid style the oars on Reg Barker's 2012 BayRaider Expedition, Alice Amy, are ready for rapid deployment. Note the boomed, semi-balanced jib

angle. If you want a fully self-tacking rig and don't mind sacrificing some upwind performance, it's a good choice. Now, however, Matt Newland of Swallow Boats has added a more conventional option with the forestay taken to the end of a bowsprit. You have to tack the jib manually, but many owners clearly consider this a small price to pay for the increase in performance due to the extra sail area, tighter luff and narrower sheeting angle.

Just add water

Whatever your preference in the jib department, the BayRaider is a sprightly yet forgiving boat. Unballasted, she weighs just 520kg (1,150lb), making her easy to trail and giving her the handling qualities of a big dinghy. Opening the bung to let in 300kg (650lb) of water ballast increases the stability and makes her self-righting from 90° for sailing in heavy weather or in family mode.

The cockpit is self-draining

and the mizzen creates an enormously versatile rig: use it as a steadying sail at anchor, to help trim the boat or to get out of irons. Or just drop the main and sail under 'jib and jigger'.

While she has elements of traditional appeal, the BayRaider is an efficient and rewarding sailing machine. In the race I sailed with Nick and Kate we couldn't point with the Sailart 20 (tested over the page) or match the pace that *Molly's* extra waterline length bestows upon her, but that was almost inevitable. Downwind she sizzled: flying the asymmetric spinnaker we spent much of the time on the plane, clocking around 12 knots in the gusts.

Whether you're into raiding or just in search of an attractive, safe, stable, practical and versatile trailer-sailer, the BayRaider Expedition definitely does the business.

BAYRAIDER EXPEDITION

Price	from £20,000
LOA	6.01m (19ft 9in)
Beam	2.06m (6ft 9in)
Draught – board up	0.25m (0ft 10in)
– board down	1.41m (4ft 8in)
Weight – unballasted	520kg (1,150lb)
– with water-ballast	820kg (1,807lb)
Sail area	17.70sq m (190sq ft)
Contact	www.swallowboats.com

Boats on the raid continued...



She's not your typical raid boat, but the Sailart 20 performs well and this one goes raiding all over Europe



ABOVE A simple open-plan interior. Joinery modules for the galley or general stowage can be built in either side or both

Sailart 20

Seeing the Sailart on the entry list came as a surprise. I imagined that raid boats would be traditional in style; perhaps 'modern trad', like the Kites and BayRaiders, but

not unashamedly, no-attempt-at-pretence sort of modern.

There's no rule to say that boats must at least nod in the direction of tradition before they can be accepted on a raid. It's just that raiding tends to suit traditional-style boats: they often have bigger cockpits, shorter spars and layouts that make them easier to row. Most also have centreplates or boards that are light and easy to lift for beaching or exploring the shallows.

That the Sailart is anything but traditional is one reason she jumped out. The other is that I had met the Sailart range at the Düsseldorf Boat Show in 2013 and liked what I saw.

In some ways it's ironic that the

owner of the least typical raid boat is one of the most dedicated raiders. Michael Foster even used to work for Albacore-Dacmar. Now based in the French Alps, he spends the summer on raids throughout Europe, towing *Sugar Bossy* behind his Land Rover Discovery and living aboard with his partner, Looloo Murphy, and Diego, a seasoned seadog whose insouciance would rival that of the coolest of cats.

The art of sail

Sugar Bossy was the first boat I sailed on the raid and undoubtedly one of the fastest. On our morning's sail up the River Fal to Malpas and back to Turnaware Point for lunch, no boat within sight stayed ahead for long – though we did indulge in a little tactical sailing to make best use of the wind-bends and eddies between the high banks.

The Sailarts are designed for the European lakes rather than the open sea, but the 20 is a delightful boat to sail in flat water: responsive, comfortable and nicely

Pathfinder 3

I first met Colin Cumming's *Pathfinder 3* a few weeks before the raid, at the Ditsum Gaffers' Regatta where I had been sailing Mike Lucas's stunning 16ft Oysterman, *Marie Louise* (featured in PBO December 2010). In the light conditions we pipped *Pathfinder 3* on corrected time to win by eight seconds. I knew this double-ended plywood two-master with her unusual chines was quick – and would have had us in a breeze.

Just over 4.88m (16ft) long, she's the third incarnation of a concept that Colin has developed for simple home-building from four sheets of plywood. He drew his inspiration from the small canoe yawls that were popular in the

early decades of the 20th century. Not many people owned cars in those days – let alone trailed boats behind them – but the yawls' light weight meant they could be lifted into a railway carriage by three people. It was what you might call carriage-sailing rather than trailer-sailing.

On the water, the round sterns offered resistance to pooping when they were being beached through the surf, and the yawl rig allowed them to drift and fish in relative comfort.

Easy building

Pathfinder 3 is light and unballasted; more dinghy than dayboat. Her unusual shape derives partly from the way she's built: each side is formed from two sheets of plywood joined end-to-end (though she's actually 16ft 6in overall by virtue of some clever design). The ply is darts rather than cut to form the chines. At the bow, the chine is like that of a conventional single-chine



Discontinuous chines: formed by darts in the plywood, the chine towards the stern adds stability and encourages planing

dinghy, a continuation of its line intersecting the stern. The after chine starts at about mid-length, well above the waterline, and is in the style of that on a Mirror 16 where its continuation would intersect the sheerline. In fact, *Pathfinder 3* is a pushme-pullyou: for rowing, both the hull and the ergonomics work best if the stern becomes the bow. Just don't forget to remove the rudder.

As well as simplifying construction, the chines make for

an efficient hull. In light winds, the upright sections present minimal wetted area. In ghosting conditions they're best heeled beyond the chine. In a breeze, the chine helps stability and, combined with the absence of rocker, promotes planing despite the round stern.

Building should take 150-200 hours. Colin calculates costs of around £600 for the hull and £1,500 for sails, spars and fittings. As he says, 'you'd be lucky to get a tatty old Wayfarer for that'.

PATHFINDER 3

LOA	5.03m (16ft 6in)
Beam	1.83m (6ft 0in)
Draught (centreplate down)	0.9m (2ft 11in)
Hull weight	90kg (198lb)
Sailing weight	130kg (287lb)
Sail area	10.5sq m (113sq ft)
Contact (for <i>Pathfinder 2</i>)	www.fyneboatkits.co.uk



Michael and Looloo, with Diego sniffing out the wind shifts and calling tactics

balanced as well as quick. The rubberised non-slip material on deck works well, even if it's only partially resistant to the effects of canine claws over several years.

As a nippy, well-thought-out trailer-sailer that makes no concessions to tradition, the Sailart has much to recommend her.

SAILART 20

Price	from £19,488
LOA	6.00m (19ft 2in)
Beam	2.50m (8ft 2in)
Draught – centreplate up	0.60m (2ft 0in)
– board down	1.40m (4ft 6in)
Displacement	820kg (1,807lb)
Ballast	180kg (397lb)
Sail area	17.80sq m (192sq ft)
Contact	www.sailart.de



Ghosting down the Fal: Pathfinder 3's light weight and narrow waterline give her good performance in light airs

At the moment, kits for just the 4.42m (14ft 6in) version of *Pathfinder* are available, for £1,160. 'I want to be the guinea pig with this one', says Colin. 'It's not my customers' job. I will release the plans when I'm ready.' After our sail we discussed some possible refinements, but I'd be surprised to see anything major. Since Colin has also just launched a sporty-looking 19-footer in the style of a big dinghy with a cabin, plenty of people will be watching this space.

Kite

Andrew Wolstenholme designed the Kite because he and his co-owner Colin Henwood – also the boat's builder – wanted something to sail with their families. The families had grown up by the time the boat arrived, but she was conceived with raiding in mind and raiding is what she has been doing. She also took overall handicap honours in the biggest (and rather breezy) race of the Old Gaffers' 50th anniversary event in Cowes in 2013.

This is another boat I had seen at my home club on the Dart before the raid; not Andrew and Colin's prototype but No2, built by Dick Phillips for Gil and Carolyn Hayward. Both boats had been in Cowes and both were in Falmouth.

While there are differences between them, they're essentially the same 21ft, single-chine centreboarder built of 9mm glass-sheathed plywood and weighing just 750kg (1,650lb). In some ways the Kite is an update of Andrew's popular Norfolk Gypsy – similar in size and reminiscent in appearance but, as Andrew puts it, 'half the weight and twice as fast'.

This is indeed a speedy gaffer. Her stainless steel centreplate incorporates lead in the tip and is encased within a wooden profile forming a NACA section. When I raced with Andrew, we left everyone well astern until Molly's extra waterline length



The designer and the builder – Andrew Wolstenholme and Colin Henwood – sailing their own Kite, the first one launched

allowed her to reel us in on a long reach.

Had they been flying their spinnakers the BayRaiders might have been a threat, too. As my sail with Nick Peters immediately afterwards reminded me, with the ballast tank empty they're eager to plane downwind. The BayRaiders have the feel and character of a big, stable dinghy (though they're still self-righting when ballasted) whereas the Kite, despite being only a foot longer, feels like a substantially bigger boat.

KITE

Price (GRP version)	£31,950
LOA	6.40m (21ft 0in)
Beam	2.13m (7ft 0in)
Draught – centreplate up	0.25m (0ft 10in)
– centreplate down	(1.16m) 3ft 10in
Weight	750kg (1,654lb)
Sail area	19.7sq m (212sq ft)
Contact (for plywood boats)	www.wolstenholmedesign.com
(for GRP boats)	www.demonyachts.co.uk

Cabins for Kites

Wanting more accommodation than on the original Kite, Gil and Carolyn had Dick Phillips extend the coachroof to create space for a chemical toilet at the aft end of the cabin. They're very pleased with the result.

Unlike the BayRaider, the Kite is not designed with rowing in mind. Auxiliary propulsion comes from an outboard in a well. Because it can't be tilted to bring the prop clear of the water, reducing drag means lifting it into a locker. This might be seen as a drawback by 'downsizers', from whom the Kite is attracting much interest, but the boat sails so well that Gil says he has hardly had occasion to use the engine.

Expect to see more Kites on the water soon, including the first of the production versions, built in glass foam sandwich and vacuum-infused vinylester resin by Demon Yachts near Ipswich. She's due to be shown at Beale Park Boat and Outdoor Show in June.



A longer coachroof was the choice of Gil and Carolyn Hayward, happy owners of Kite No2. A GRP production version will be sailing soon

Using a cordless drill

A cordless battery drill is the number one power tool for the practical boat owner. Julian Peckham explains why

Drilling, screwing, stirring, sanding... the cordless drill does all this and more. It's probably the most versatile power tool you can have in your toolbox.

Even if you have electrical power in the boatyard or on a marina, chances are you'll always be running short of sockets to run power tools, so the fact you don't need a corded drill is always going to be a bonus, quite apart from the cordless drill's sheer portability on board.

Choosing a drill

There are dozens of makes and models on the market, and some are better than others. Go for a well-known brand, or one of the own-brand models from the big DIY chains, and you should end up with something that's tough and reliable.

What sort of batteries? A drill/

driver with older NiCad technology is cheaper – you can get a fully-featured one for less than £50 – and in many cases will do just as good a job as the newer Li-ion battery drills which tend to be around twice the price.

Whichever you go for, get at least two battery packs so one can be on charge while you're using the other. A fast charger that'll rejuvenate the batteries in around half an hour is a godsend.

Most decent drills come with torque settings, two gears and variable trigger speed. Some also have hammer action, but unless your boat is ferro-cement and you're drilling into it, this is one feature you may be able to do without.

Power is the only other main



My own well-used Makita with NiCad batteries in its tough carry case



consideration. Anything less than 12V is unlikely to provide the grunt you'll require: I'd go for 18V every time. A tough carry case is extremely useful, and there's usually room inside to store other bits and pieces too.

Using the torque clutch

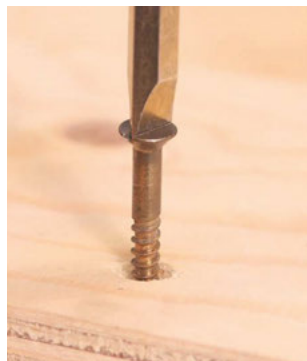
Apart from the obvious – drilling – a cordless drill is invaluable for

screwing in and taking out fixings. A well-charged 18V drill can provide more torque than you can achieve with a mere handheld screwdriver.

■ When screwing into softwood particularly, it's all too easy to drive the screw deeper than you want – which is where the torque clutch comes in.

■ Set the torque clutch to a low figure to start with, then drive the screw until the clutch starts clicking. If you need to screw deeper, dial up the clutch to a higher figure and try again. You'll soon get the hang of which torque setting suits which job.

How to avoid chewing screw heads



1 Always match the driver bit to the screw you're driving, be it a traditional slotted screw or a crosshead screw. A worn bit (or one that's too small) is a sure-fire way to damage the screw head so it becomes impossible to drive in or out.



2 The weight of the drill won't be enough to stop the bit jumping, so apply even pressure to the back of the drill with your free hand to make sure it stays firmly in place. If you have space, position your body over the drill to get some extra weight behind it.



3 When tightening screws, you can stop the bit jumping from the slot and chewing the head when the screw has driven as far as it's going to go by setting the torque clutch.

TOP TIP

A stiff wire hook in a cordless drill makes a great paint stirrer. This one is a stainless steel cavity wall tie rescued from a builder's skip.





Beaulieu Boatjumble has just got bigger!

Beaulieu
Boatjumble
Sunday
26 April

All aboard the first PBO Ask the Experts Live event for free advice!

Visit Beaulieu Boatjumble on Sunday 26 April and you'll not only be able to enjoy

boating bargains at hundreds of stands, but also PBO's new Ask the Experts Live attraction.

For decades, PBO has offered a free advice service through our magazine pages, and now we're bringing it to life for the first time. We're teaming up with the RYA Active Marina team and dozens of marine industry experts to offer Boatjumble visitors a marquee area with non-stop practical presentations, demonstrations and the chance to quiz the pros on a range of topics.

Experts include Ocean Safety,

who will be carrying out a liferaft demonstration; Met Office forecaster Penny Tranter; Golden Arrow Marine engineers; surveys expert Nick Vass; World Cruising Club director Jeremy Wyatt with advice on how to prepare your boat for long-distance cruising; representatives of Silky Marine with guidance on polishing and restoring faded glassfibre; a demonstration on sealants by Sika; Steve Bryant and Don Thomson of visitmyharbour.com,

who will be giving a talk on using tablets for navigation; the Wessex Resins team carrying out a demonstration on basic glassfibre skills, plus representatives from Navionics and International Paint.

Lifejacket clinic

Other attractions include a lifejacket clinic with RNLI Sea Safety Events supervisor Mike Hannam, who will offer some safety tips and show you how to service your inflatable lifejacket, as

well as keeping it in good order. Bring your lifejackets and check your new Boatjumble purchases! There will also be a cruising clinic with RYA cruising manager Stuart Carruthers, and a knot wall with four knots to challenge both adults and children.

PBO staff will be showcasing our project boat *Hantu Biru* for a third year – the Snapdragon 23 that was bought as a wreck on eBay and restored over two-and-a-half years.

ABOUT THE BOATJUMBLE Now in its 38th year, the Beaulieu Boatjumble regularly attracts 8,000-plus visitors to the beautiful grounds of the Hampshire country estate in the New Forest. Hundreds of stalls selling new and used boating bargains, new trailerable boats, dinghies, equipment and craft from classics to nearly-new make for an unmissable event for all sailors.

Boatmall

The Boatmall has the latest products from leading manufacturers displaying trailerable yachts, dinghies, motorboats, accessories, clothing and services.

Display area

This area is dedicated to demonstrations and interactive activities for both children and adults. Calshot Activities Centre will once again be providing a climbing wall, and the Maritime Archaeology Trust will be bringing their Maritime bus alongside the return of the popular surf simulator and much more to be announced. In addition, the Beaulieu Camera Group will have a marine photography exhibition.

Boatmart

If you are looking for a used boat, the Boatmart provides a unique opportunity to browse around a wide range of used craft for sale, from classics to nearly-new and those in need of restoration.



An extensive range of used boats, from projects to classics and nearly-new, can be found at the Boatmart

Trunk traders

The enlarged Trunk Traders area gives amateur boatjumbblers the opportunity to clear out their lockers and garages of boating bits and set up shop from their car boots.

Flare disposal

New for 2015: the Marine Police Unit have teamed up with Ramora UK to provide a flare disposal service at the Boatjumble. Bring along your old and unwanted flares to Ramora's disposal point on the day to have them safely disposed of by the experienced explosive ordnance disposal team.

Opening times

Admission is from 9am for the Boatmall and Boatmart and 10am for the Boatjumble. Boatjumble tickets include admission to the National Motor Museum, Palace House, Beaulieu Abbey, and World of Top Gear.

Ask the Experts Live talks schedule

9.30AM: BE YOUR OWN SURVEYOR

Independent surveyor Nick Vass will talk about common problems that arise during surveys of second-hand boats.

10AM: SAIL GREENER

Royal Yachting Association Green Blue development officer Kate Fortnam will be sharing advice on environmental best practice for recreational boating. Throughout the day, Kate will be on hand to answer questions about oil/fuel spillage; reducing the spread of non-native invasive species; environmentally-friendly boating products; and removing and applying antifouling.

10.30AM: ESSENTIAL SEALANT TIPS AND TRICKS

Sika's technical services expert Gareth Ross will give a talk with demonstrations on how to use sealants for bonding and waterproofing on board.

11AM: HOW TO READ THE SKIES

Met Office weather forecaster Penny Tranter will share her knowledge of preparing for and responding to impacts from the weather.

11.30AM: LIFERAFT DEMONSTRATION

Ocean Safety will be discussing the importance of getting your safety equipment serviced, complete with a demonstration

Professional paint job made easy, 2.30pm



lifteraft inflation. They will also be on hand to assist and give advice on all aspects of marine safety, as well as answering your servicing questions.

12PM: CROWD-SOURCED CHARTING

Navionics will be sharing their expertise on the future of charting, how they use social mapping/crowd-sourced elements and their compatibility with PC, iPad and plotter.

12.30PM: ENGINE TROUBLESHOOTING

Golden Arrow Marine will share top tips on how to keep your inboard and outboard engines running smoothly.

1PM: PREPARING YOUR BOAT FOR LONG-DISTANCE CRUISING

World Cruising Club director Jeremy Wyatt will offer advice on how to get your cruiser ready for extended voyaging.



Using tablets for navigation, 2.00pm

1.30PM: BASIC GLASSFIBRE SKILLS

West Epoxy (Wessex Resins) will share their expertise with some hands-on demonstrations of using epoxy and glassfibre to refit and repair your boat.

2PM: USING TABLETS FOR NAVIGATION

Visitmyharbour.com's Steve Bryant and the team's harbour research man Don Thomson will give a talk about using tablets for navigation on boats, accompanied by plenty of demonstration equipment.

2.30PM: PROFESSIONAL PAINT JOB MADE EASY

Experts from International Paint will show you how to roll on and tip off paint to get a mirror shine on your new paint job!

3PM: POLISHING AND RESTORING FADED GELCOAT

Silky Marine will share their expertise with hands-on demonstrations showing how to make your gelcoat shine again.

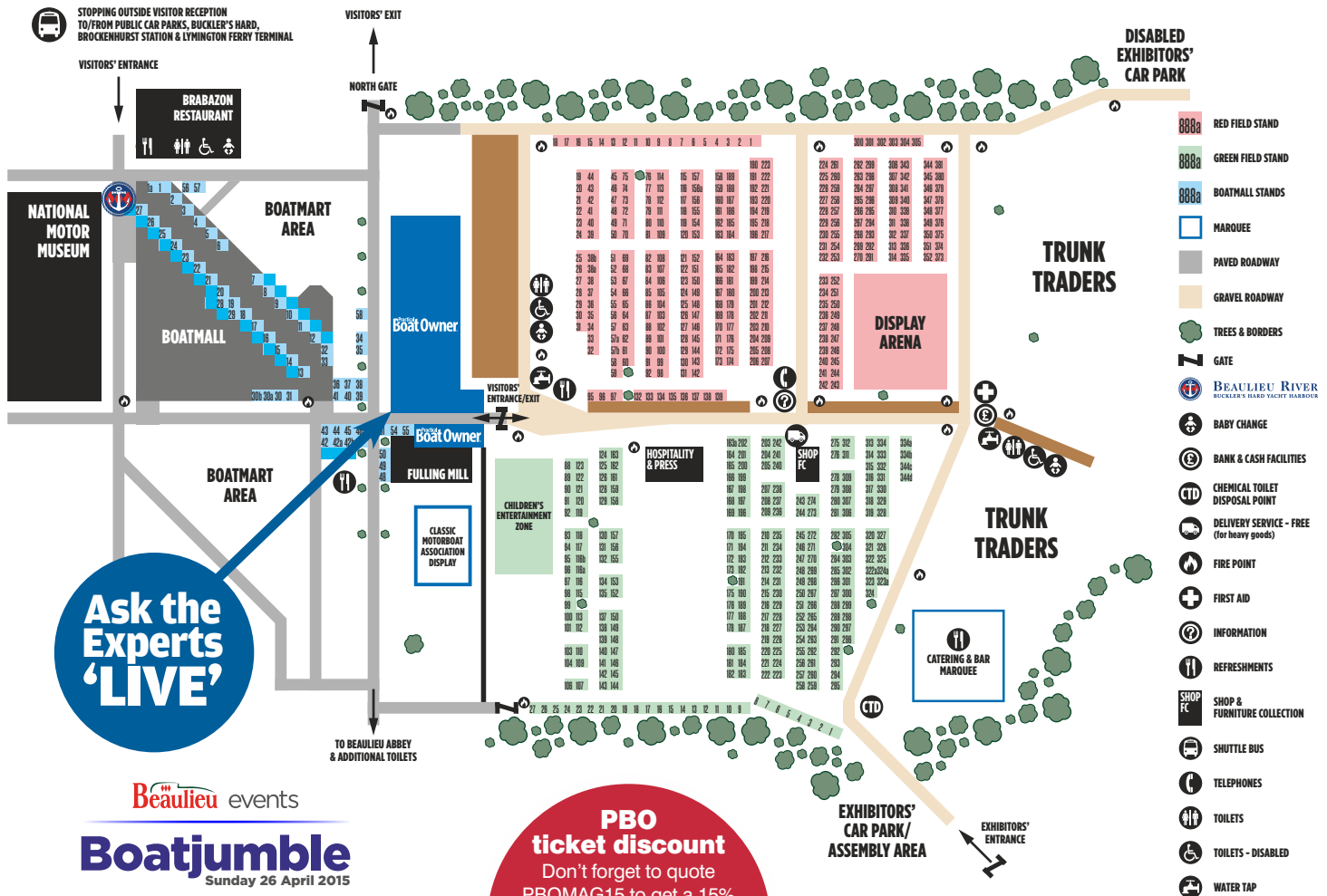
3.30PM: WHAT'S CAUSING THE CORROSION?

PBO contributor Colin Brown will give a corrosion-specific talk on boat surveys.

4PM: ESSENTIAL RADAR SKILLS

Independent expert Alan Watson will show you how to get the most out of your radar.

Register online to secure your place at the FREE talks: <http://po.st/experts> – the first 30 to register will receive a free pack of PBO 'Free Anchorage' playing cards. You can also just turn up on the day!



Beaulieu events
Boatjumble
Sunday 26 April 2015



While you're at the PBO stand, why not pick up a subscription to Practical Boat Owner, your favourite boating magazine? Our £16.99 offer (based on a six-monthly Direct Debit) will include a free gift (while stocks last).

Got something to sell at the Boatjumble?

BOATJUMBLE – Stand space offers a cost-effective way to sell all your boating bits. Uncovered stands cost from £55. New for 2015 are multi-stand reductions: double your uncovered stand space for just £35. For a total price of £90 you will have the use of a double-size stand space.

BOATMALL – Marine equipment on Beaulieu's nautical high street. Stands cost £85.

BOATMART – Sell used trailerable boats. Stand prices from £30.

TRUNK TRADERS – Sell boating bits from your boot. Plots from £35.

■ For more information visit the Beaulieu website, www.beaulieu.co.uk, email events@beaulieu.co.uk or call on tel: 01590 612345.





6 compact freshwater hoses

PBO
TESTED

How portable, practical and useable are cassette-type hoses? Ben Meakins wrestles with the problem, tests six models and promises not to gush

It's long been the case that marinas across the Channel don't supply hoses, but in the past few years marinas in the UK have been removing theirs at an alarming rate too. That means that if you want fresh water, either to wash down your boat or fill your water tanks, you will need to carry your own hose. The simplest solution is to take a length of hosepipe – but storing one, even on a garden-type reel, takes up a lot of valuable space on any boat.

That leaves cassette-type hoses. I remember being frustrated almost to tears as a child when trying to roll up a 'collapsible' cassette hose which kinked, jammed and refused to go back on its reel. However, there are a range of options, so we collected together six ways to get water from a tap to your boat and put them to the test. We looked at the quality of the fittings and how leak-resistant they were, as well as the quality of the hoses themselves. We also assessed ease of use and replacement on

the reel, and resistance to kinking.

Only three of the hoses we found were suitable for drinking water, or marked as 'food grade'. This isn't an issue if you're just looking to wash your boat down, but to fill a water tank it's worth spending the extra money for a food-safe hose. Some plastics, often present in

garden hosepipes, can leach bisphenol A (or BPA) used in the manufacturing process into the water, which is a potential health risk. Manufacturers recommend running the hose through before placing it in your tank (a good idea anyway), to clear any nasties from the pipe. A food-safe hose is a wise investment!



Freshwater hoses are disappearing from marinas and boatyards, which means you'll need your own



Food-grade hosepipe

PRICE: £25

CONTACT: www.ebay.co.uk

Length: Whatever you want it to be

Stowed size: Around 80x80x20cm

Flow rate: 5lt: 17s = 18lt/minute

Standard hosepipes have the advantage that they are relatively cheap, easily available and some are even made from food-grade hose: and besides, you can have any length you want. The downside is that they are bulky to stow: reels are available but are big and heavy, too big for most boats' cockpit lockers.

Our sample hose was 15m long, sold as a food-safe motorhome hose, and cost £25 from eBay. It was supplied coiled, but as with any standard hosepipe it was difficult to stow unless it was coiled back up and tied with string. The smallest we could coil it was 80x80cm. It was, however, resistant to kinks and had a very good flow rate, although experience tells us that hosepipes become more susceptible to kinks as they age.

ON TEST: Second-best flow rate, available online in any length and safe for drinking water if made from food-grade hose, but too cumbersome to stow on most small boats.

Force 4 50ft flat hose

PRICE: £29.95

CONTACT: www.force4.co.uk

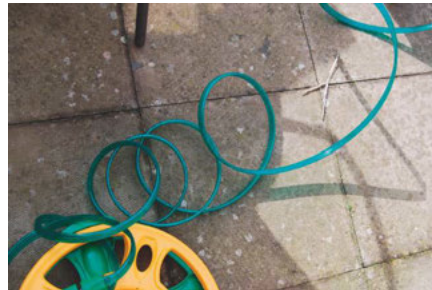
Length: 15m (50ft)

Stowed size: 47x40x6cm

Flow rate: 5lt: 35s = 8.6lt/minute

This hose, which we bought from Force 4 but which is also available from a number of gardening outlets, is of different construction to the others on test, comprising three 6mm hoses bonded together to create one flat hose. It comes stowed on a captive reel, with a Hozelock type push-fitting at each end. The reel is solidly made and has a good winding handle. It isn't certified for drinking water.

Its flat design means that it is almost impossible to kink, and the semi-rigid construction means that you don't need to remove all the water to replace it on the reel. However, the semi-rigid design means that it comes off the reel formed in coils, which makes winding it back longer than it should. The plastic hose also proved to be quite brittle: after keeping it in a locker for nine months with occasional use, the hose fractured where it was held by the centre of



Despite the loops, it proved resistant to kinks...



The reel was good quality and compact

the reel. It's still usable without fittings on one end - until the other end fractures.

ON TEST: Resistant to kinks, but the semi-rigid design makes the hose itself brittle. Its design gave it the lowest flow rate on test. It fractured at the point where it is held by the reel after nine months' storage on our boat, having been used only four times.



...but fractured where held by the reel

Meridian Zero 20m flat hose

PRICE: £39.95

CONTACTS: www.force4.co.uk, www.foxsonline.com

Length: 20m

Stowed size: 43x37x4.5cm

Flow rate: 5lt: 20s = 15lt/minute

This hose is available from Force 4 and Fox's chandleries. Made in the UK, it comprises a flat, single-core hose with good quality push-fit end fittings which didn't leak under pressure. A 1in BSP threaded male adaptor is supplied along with a 25-38mm female hose clamp for awkward fittings, and there is a variable nozzle on the end.

The reel is made from plastic, and there is a removable winding handle which slots into a socket but is stored inside the reel. This could get lost in a locker, so perhaps it should be drilled for a lanyard attachment.

The hose was resistant to kinks - the thick-walled hose meant that water pressure pushed them out, and it had a good



flow rate. The end fittings can be cut off and reattached should any section become damaged. The hose wall was thicker than any of the others on test.

Winding the hose back onto the reel was a slightly tortuous affair as all the water had to



This hose had well-made, leak-free fittings



The handle can be removed for storage

be removed first to allow the hose to fit on the reel and, without the water pressure to keep the kinks out, it had to be laid flat on the pontoon. But as long as this was done, it wound back on with no fuss.

ON TEST: A high-quality food-grade hose with well-made fittings that didn't leak, a good flow rate and a useful reel.



Kingfisher Kink Resistant Lay Flat Hose Set



PRICE: £13.19

CONTACT: www.machinemart.co.uk

length: 15m, **stowed size:** 27x33x3cm

flow rate: 5lt: 25s = 12lt/minute

Kingfisher Gardening's Kink Resistant Lay Flat Hose Set is sold by a number of outlets. Ours came from Machine Mart, but it's also available from Towsure and online. It's a compact reel, with a plastic hose and braided cover. It comes with two tap fittings, one with a 3/4in BSP thread and another with a 1in BSP thread. It has a Hozelock-style quick-release fitting on each end. It comes with a spray gun attachment which is useful for rinsing off and cleaning but less good for filling water tanks. It's not certified as food-safe or suitable for drinking water, so it should be

used accordingly.

As with all flat hoses, it must be removed from the reel entirely before use. When removed from the reel and connected to the tap it filled with water like a snake coming to life, and was somewhat prone to kinking, although the water pressure eventually ironed these out. It had a flow rate of 12lt/minute. The push-fit end fittings were prone to leaking under high pressure.

Replacing it on the reel was a nightmare. The inner hose kinked and rolled as the outer cover stretched, making removing all the water nearly impossible – a necessary precursor to rolling it up. We eventually got it back on the reel by laying it flat on the pontoon and squeezing the water out inch by inch, which took longer than it had taken to fill the tanks.

ON TEST: Cheap, and a good flow rate, but prone to kinks and soul-destroying to replace on the reel.



The hose had to be fully drained to replace it on the reel, and the inner kinked and jammed



XHose

PRICE: FROM £19.99 (15M)

CONTACT: www.officialxhose.co.uk

Length: 5m contracted, 15m expanded

Stowed size: 25x25cm

Flow rate: 5lt: 15s = 20lt/min

The XHose is a food-grade hose with a plastic inner and an elasticated outer sheath which shortens the hose when not in use for stowage. It is 5m long when contracted but expands with water pressure to 15m. Other models are available, up to 30m (100ft). Stowage is therefore easy as it can be coiled up or stuffed in a locker. It's also lightweight, at 45g. It comes with a standard 25mm

threaded adapter on the tap end and a Hozelock-type push-fitting on the other end. It also has a shut-off valve at the end.

When the water pressure was applied, it expanded and lengthened like a gorging python. Its flow rate was the best on test at 20lt/minute, but it was important to keep the pressure up in order to keep the hose at its full length – backing the tap off meant the hose began to shorten, so taps with very low pressure could pose a problem. However, with an adjustable nozzle on the end you can reduce the flow rate but keep the same water pressure in the hose – the fittings were good quality and showed no signs of leakage. It comes with a one-year warranty, but this can be extended to three years for an extra £14.99.

ON TEST: Excellent – easy to store and good quality, with an impressive flow rate, but high pressure is needed to maintain its length. This pressure meant it resisted kinks well, too.



End fittings were of good quality and leak free



Hozelock Pico Reel

PRICE: £24.99

CONTACT: www.hozelock.com

Length: 10m

Stowed size: 31x26x26cm

Flow rate: 5lt: 17s = 18lt/minute

Hozelock make a mini-hose reel for small gardens and balconies, the Pico Reel. It's 10m long, which is on the short side for marina use, but the fittings are good quality and leak-free. The flow rate was equivalent to our standard hosepipe. The round hose stows on the reel without any need to remove the water first, and the reel is compact. It comes with well-made push-fit fittings and a spray gun, and can be used partly wound on the reel if the tap isn't far away. The hose is not food-safe, so shouldn't be used for drinking water.

ON TEST: Small and compact, ideal for washing down a boat. The reel would be easy to stow in most lockers, and the fittings are of good quality.

PBO verdict

All the hoses worked in that they transported water, but there were some major differences.

It's best to go for the longest hose you can: a quick survey of local marinas showed that no berth was further than 15m away from a hose, but there's always a chance that a hose won't be quite long enough to reach your boat. That means that our joint best buy award goes to the 20m Meridian Zero hose and the XHose, also available in that length. The XHose had the best flow rate on test and coiled back up into a soft, small, easily stowed coil. We'll conduct some longevity tests and report back, but while the Meridian Zero hose was of higher quality and feels like it would last better than the XHose, it isn't as easy to store.

The other hoses tested would be ok for wash-downs, but all bar one weren't food-grade: and in some cases were seriously lacking in quality.

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How to make a steering quadrant

After the cast aluminium steering quadrant on his 40-footer broke apart, Isaac Adam-Azikri constructed a robust mild steel replacement for just £46



It is not often that one hears about a steering quadrant breaking to pieces, but talking to other cruisers made me realise that it was a more common occurrence than I had previously thought.

The cast aluminium quadrant we had on *Rhythm* had been in use for approximately 15 years, and it looked perfectly sound when removed and checked in England in 2006 during a major refit. However, three years later, in the middle of the Tasman Sea, we encountered a storm 280NM north-west of Cape Reinga. To cut a long story short, the port steering wire broke and the loose rudder slammed to port, hitting the rudder stop and causing the quadrant to break apart. Luckily we carried an almost identical spare quadrant, including wires, and were able to effect repairs.

After that incident, I had little faith in production-line quadrants. After all, most of them are cast in various metals, aluminium or some other alloy – and as always, quality of construction is dictated by budget. Cast metal is hard, but has no give: it's very brittle and susceptible to shock. Worse still, most steering quadrants have to incorporate accessories

such as an autopilot rudder indicator arm and a bracket for the autopilot hydraulic ram: this means having to drill holes in the quadrant and thereby weaken it.

Now, I am not an engineer, but I was recovering from a broken pelvis and felt eager to do something constructive after laying on my back for two months. With the spare quadrant now in use I wanted to fabricate and fit a stronger one using thick mild steel.

The challenge was to make a cheaper but better product using only basic tools and a welding set, with no machining required. The only difficulty I could foresee was constructing the keyway which would lock the quadrant to the 2in rudder stock.

Making a template

I decided to make an outline drawing of the quadrant for reference. I placed the old one on $\frac{3}{4}$ in ply and drew a fairly accurate outline: this would be invaluable during fabrication. It is important to note that the outline drawn should include the wire channelling on the arced side of the quadrant's frame: these channels will be welded on later and will increase the overall size.

ABOUT THE AUTHOR



Isaac Adam-Azikri, 57, became a professional skipper in 1977, then retrained

as a commercial diver and worked in the North Sea for 20 years. He recently completed a seven-year circumnavigation with his family aboard *Rhythm*, a 12m (40ft) steel cutter.

Materials and tools

I ordered enough mild steel to have some to spare.

- Pipe, 2in internal diameter x 4mm thick (boss section);
- angle iron bar, 50mm x 50mm x 5mm thick (framework);
- flat plate, 75mm x 10mm thick (boss flange);
- flat plate, 600mm x 600mm x 6mm thick (strongback);
- flat bar, 15mm x 4mm thick (wire channelling).

Total cost of steel: £30.

I had some scrap steel pipe and plywood around the house which came in handy for use as formers and templates.

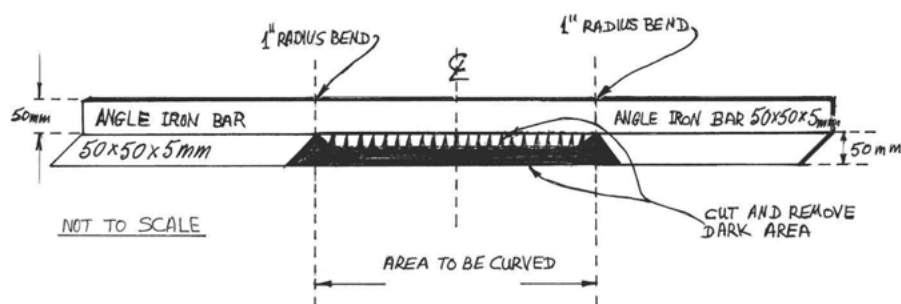
Consumables

- | | |
|----------------------------------|------------|
| ■ Welding rods, 2.5mm x 1 kg | £6 |
| ■ grinding disc (8in) | £4 |
| ■ cutting discs (4in) x5 | £6 |
| Total cost of consumables | £16 |

Tools

Angle grinder, power drill, hammer, vice, hacksaw, arc welding set, tape measure, files.

Making the angle iron frame

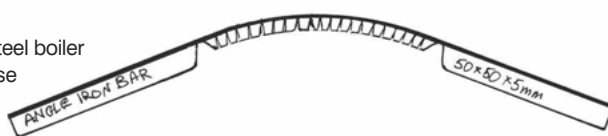


I used 50mm x 50mm x 5mm-thick angle iron bar for the framework of the new quadrant: you should use a slightly longer bar section than required and trim it to size later. I marked up the centre of the bar, which would also be the centre of the quadrant's arc or angled section. From this centre line, I measured left and right to the points where the angle iron bar was to be bent, giving it a triangular shape: I used the outline drawing as a guide.

The angle iron bar would have to be shaped into an arc in the middle section and the corners formed to shape. To make curving and bending possible, I had to cut and trim out the sections marked on the drawing.

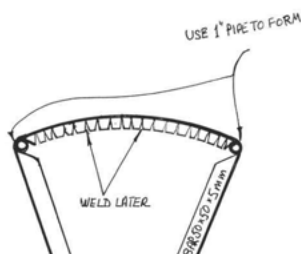
1. CREATING THE ARC

The arced/curved section was formed to the shape required. I used an old steel boiler as a former: alternatively, you could use an anvil and gently form the section to shape. Again, the outline drawing was used as reference.



2. FORMING THE BENDS

Once the arc is formed, the corners of the quadrant should be bent, giving the angle iron framework a triangular shape. Using a 1m length of 25mm (1in) steel pipe as a former, the angle iron bar was positioned in the vice at the marked point to be bent with the 25mm steel pipe clamped together in the vice. The angle between the angle iron bar and the former pipe needs to be 90°. I used a 1m x 60mm ID pipe to slide over the angle iron for leverage, which made bending easy: this procedure had to be repeated again for the second bend.



I kept comparing it against the reference ply drawing to check that the correct shape was obtained. Once the corners were bent and formed to shape the quadrant's frame was placed on the 6mm flat plate to check that it was level.



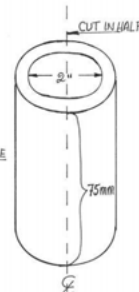
The first bend completed and the second corner clamped, ready to be formed



The formed frame is marked for cutting to the correct size and the separate completed boss clamp is ready to be drilled and welded to the trimmed framework

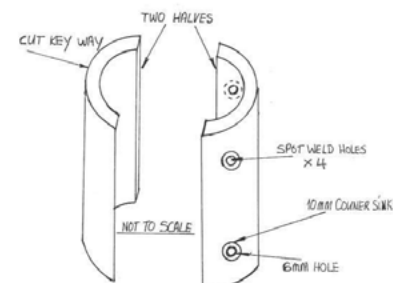
Making the boss clamp

My rudder stock has an outside diameter of 2in, so I used a pipe with 2in internal diameter x 4mm wall thickness. The idea was to use two layers of sliced pipe to form the boss section: the first layer would have the keyway cut into it. I cut the required length of pipe (75mm, in this case).



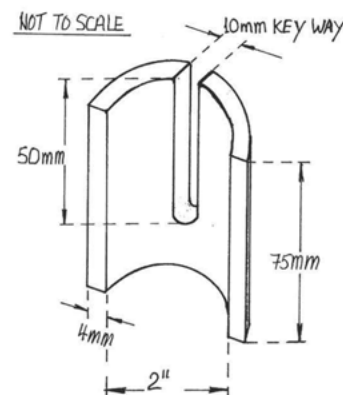
1. CUTTING THE PIPE

The 75mm pipe slice had to be cut again, but this time lengthwise, so as to end up with two equal halves (shells). For accuracy and time saving, some of the cutting can be done at the steel merchants when ordering material. (Retain the second half-pipe/shell for later.)



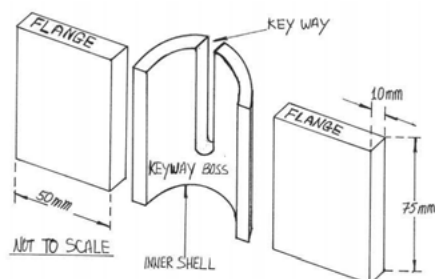
2. CUTTING THE KEYWAY

The keyway was cut next. I marked an area 10mm wide x 50mm high in the centre of one half-pipe. The keyway was to be cut by a hacksaw, making two parallel cuts to create a slot 10mm wide x 50mm high. The bottom of that slot/keyway was completed by drilling a 10mm hole at the bottom of the hacksaw cuts. I practised a few dummy runs with a hacksaw beforehand, cutting outside the scribed line and filing the slot to size.



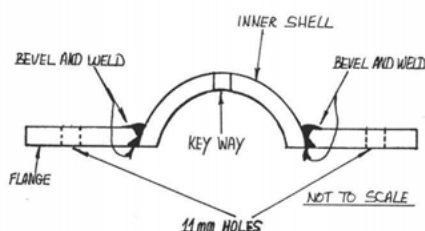
3. ADDING FLANGES

The two boss flanges were made from a 75mm x 10mm flat plate: these would be tack-welded to each side of the keyed boss (half-pipe) made earlier. The 11mm bolt holes would be drilled in later.



4. WELDING THE FLANGES

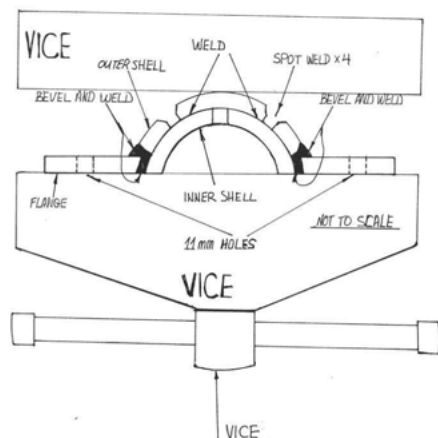
After checking to ensure that they were level, the flanges were fully welded to the keyed boss. Care had to be taken to prevent distortion.



5. CLAMPING IN A VICE

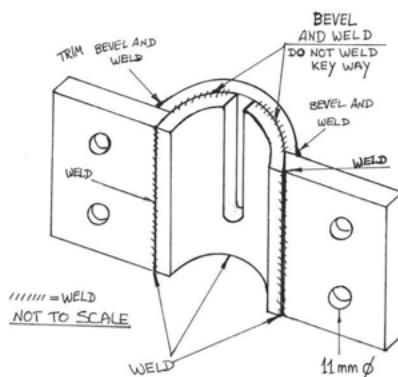
The second half-pipe retained earlier provided the outer shell of the keyed boss. It had to fit snugly against the keyed boss and therefore had to be trimmed and bevelled to fit between the flange plates. Once it had been trimmed, I drilled four countersunk holes in the second half-pipe: two holes either side of the keyway area, but well away from it. These holes provide a spot-weld aperture. I used a 6mm drill bit for the holes and a 10mm bit for the taper/countersink.

The second half-pipe was now offered to the first half-pipe (the keyed boss), and these were clamped together in a vice until they touched all around the perimeter.



6. BOSS CLAMPING COMPLETED

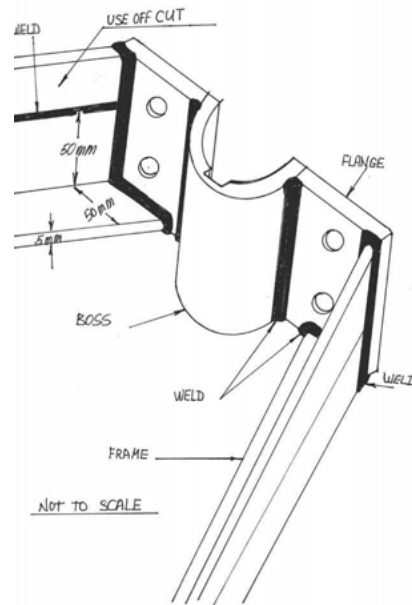
Once in position, the two half-pipe shells (the boss) were welded together all around the perimeter including the flange plates. The spot-weld holes were welded through to add further adhesion and reinforcement between the two half-shells. We now had a boss with an 8mm wall thickness. With the boss complete, the excess weld was ground and dressed. The four 11mm holes in the flange plates were drilled next: these were for the 10mm fastening bolts.



When welding at this juncture, it's important not to weld inside the keyway area or the top lip of the keyway. Lower power should be used when welding the spot-weld holes, and the work piece needs to be allowed to cool down between weld runs to minimise distortion.

7. FRAME AND BOSS ASSEMBLY

The angle iron quadrant frame and the boss clamp were positioned over the plywood drawing. The length of the quadrant's frame was marked and cut to the correct length/angle



to fit and join the boss clamp. Both components were now placed on the 6mm steel plate, which provided a level base for assembling the two components together.

Once the quadrant frame and boss clamp were aligned to tally with the original quadrant, they were both tack-welded together and the alignment checked again. (The best way to check this is to temporarily fit them to the rudder stock for reference.) The boss clamp and angle iron frame were now fully welded together. Welding was done in sequence, taking breaks to lessen the possibility of distortion.

NOTE: The final angle of the quadrant when fitted to the rudder stock will be determined at this stage, so care must be taken to get this angle right before the two components are fully welded.

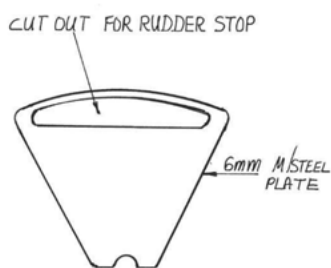


The hefty rear boss clamp showing the two lugs for the steering wire's tensioning bolts

Making the backplate

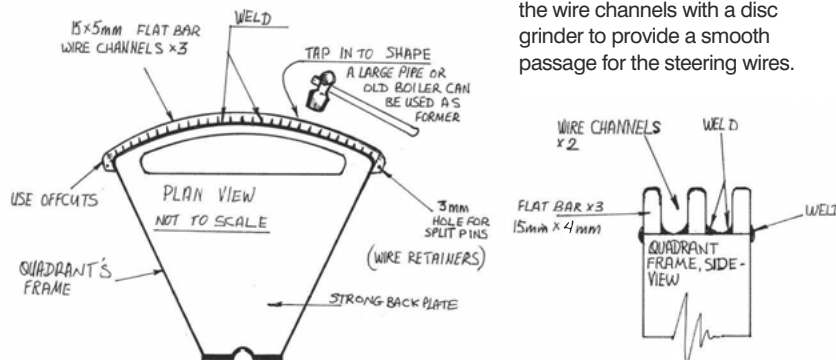
Having constructed the basic quadrant, I fashioned a backplate from 6mm steel plate with an angle grinder. I used thick paper to make an accurate template for the inner shape of the quadrant: the template's outline was then transferred on to the 6mm plate. I also used the angle grinder to cut a curved cutout slot for the rudder stop bolt.

The backplate was inserted from the top into the quadrant's frame, then intermittently welded (using up to 30mm weld runs) around its perimeter to the quadrant's frame and boss, top and bottom.



Forming channels for the steering wires

I used three 15mm x 4mm flat bars to make two channels for the steering wires. All three bars had to be slotted on one side with a disc cutter so they could be welded to the quadrant's outer arc. I welded the top and bottom ones first, then welded the middle one. Offcuts were used to complete the ends of these channels around the quadrant's corner. Once the welding was completed, I ground away the excess weld material in the wire channels with a disc grinder to provide a smooth passage for the steering wires.



Finishing touches

The quadrant was further reinforced by adding a few extra gusset plates to the joints between the keyed boss, framework and backplate. The rear boss clamp which attaches the quadrant to the rudder stock can be fabricated in the same manner as the keyed boss clamp made earlier: obviously, no keyway is needed here, which makes things simpler. Some quadrants may have to incorporate lugs for the steering wire tensioning bolts, and others will have lugs in the rear boss clamp.

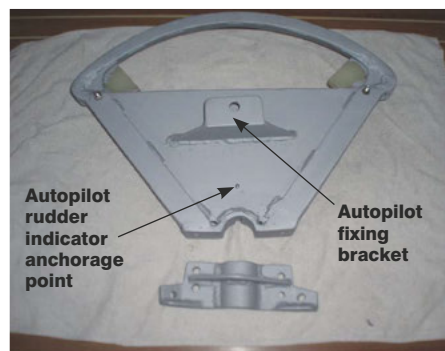
For a protective coating, the quadrant can either be galvanised

or – as in this instance – dipped in hydrochloric acid, washed and painted. Additional fixings for accessories can be added to suit one's installation. I added the following:

- (a) An emergency steering fitting. Our emergency steering is incorporated in the quadrant. A square box section stub was welded to the top centre of the backplate.
- (b) A 6mm hole for an autopilot rudder indicator anchorage point.
- (c) An autopilot fixing bracket welded to the underside of the backplate.



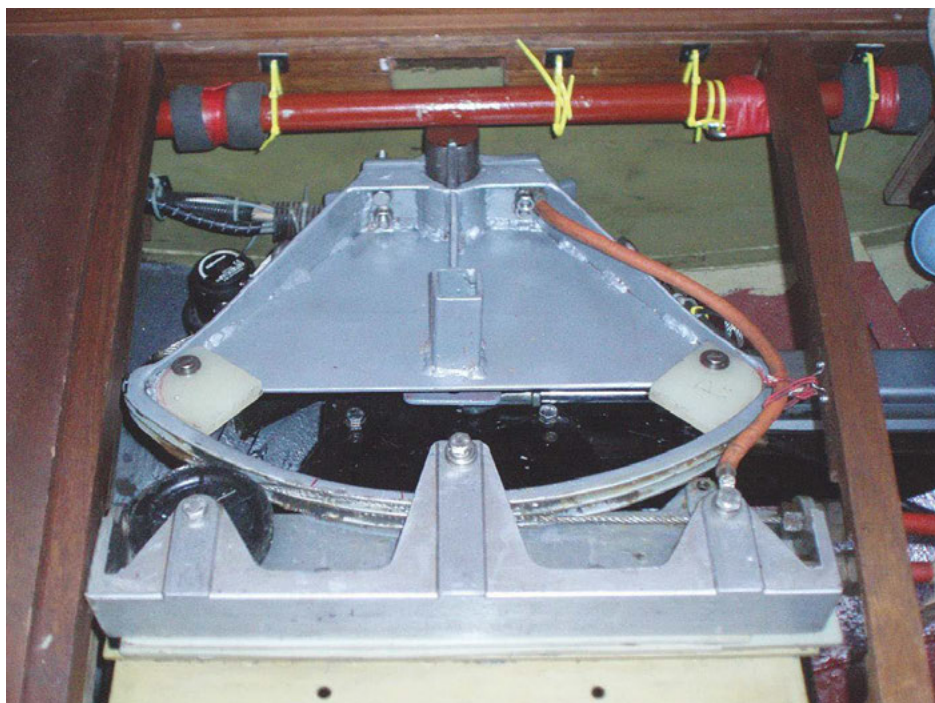
A square box section stub was welded to the top centre of the backplate to accommodate the emergency steering fitting



All systems go!

The quadrant was fitted in Australia in July 2010 and steered *Rhythm* back home to England. It is a robust unit that should last a lifetime: the weakest points in the system are the steering wires which, after all, are consumables. How much time did it take to construct? Plenty. I view it as occupational therapy!

Have fun.



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Fair winds to Fécamp



Cameron Snell guides us into Fécamp, a delightful and historic old port in Upper Normandy which makes an ideal destination for a short Channel hop

Fécamp, a once-thriving fishing port with an attractive harbour, dramatic cliffs and a long monastic history, is best known for producing a 'medicinal elixir' to a secret recipe said to have been concocted by a residential Venetian monk in 1510. It is claimed that the monks of the Benedictine abbey of Fécamp developed this aromatic herbal beverage and produced it until the abbey's devastation during the French Revolution.

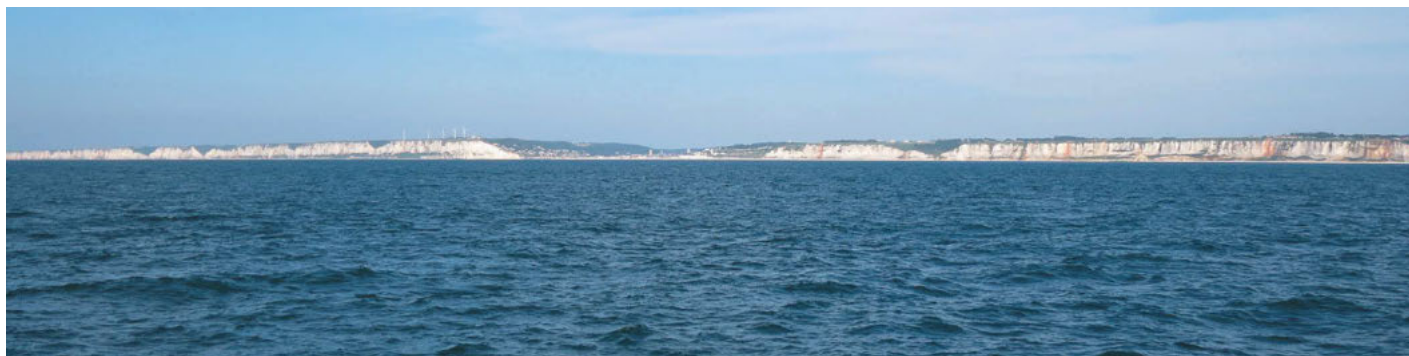
However, a more credible account

suggests that the merchant Alexandre Le Grand invented the recipe himself, helped by a local chemist, and told this story to connect the liqueur with the city history so as to promote sales. Production began under the trade name Bénédictine, using a much-copied bottle with a distinct shape and label.

Being the westernmost port on the French coast, Fécamp is very popular with British visitors from the Solent and along the East Sussex coast who can take full advantage of its 800-berth marina and reasonable tidal access.



Looking towards the 800-berth Avant Port Marina



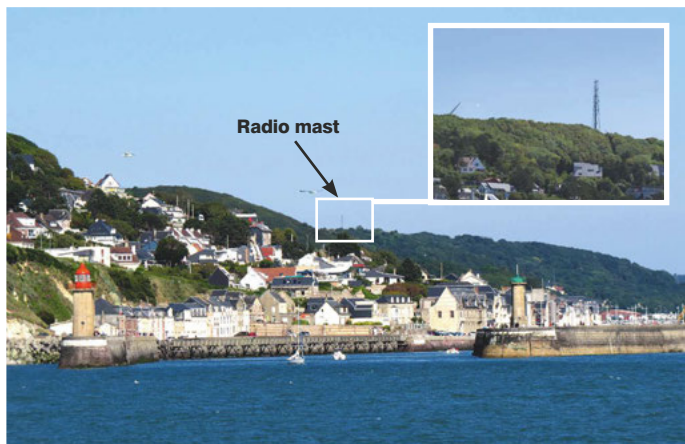
- 1** From a distance off, Fécamp is disguised from view, nestling between white chalk cliffs that could fool you into thinking you were nearer to Dover than France.



- 2** In good visibility, the modern-day landmark of a wind farm indicates the location of the harbour entrance, which lies to the south of the turbines as you approach.

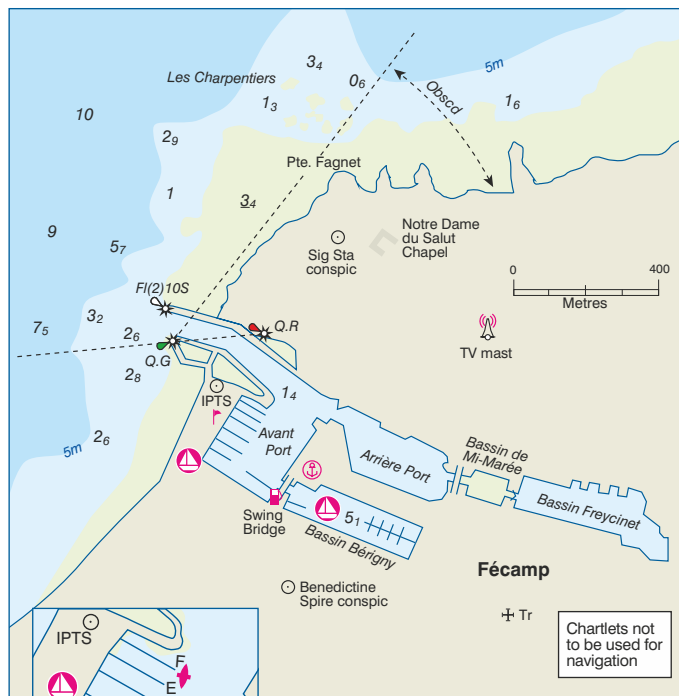


- 3** Behind the turbines, and further inland, is a radio mast, 130m above mean sea level. This lines up on approximately 086°T for a deep-water approach. At night, a pair of leading lights (Q.R behind and below Q.G) give a transit of 082°T.



- 4** The entrance is a little over 70m wide. The radio mast on the hill serves as a good line through the centre of the approach by day, although it is not registered as a navigational transit.

Once inside, shelter is excellent in Fécamp's basins, but it's best to bear in mind that a considerable surf runs off the narrow entrance even in quite moderate westerly or north-westerly winds. With the wind in this quarter, it is unanimously considered foolhardy to attempt entry in conditions greater than Force 5.



Most yachts will berth in the Avant Port Marina, immediately to starboard as you clear the eastern jetty. Berths in the Bassin Bérigny are for local craft, although you may be able to tie up alongside the quay wall.



- 5** The lighthouse on the eastern jetty displays a white flashing (Fl(2)10s) light at night despite its red-coloured top, which may confuse you into looking for a red light. The green-topped beacon on the western jetty displays a quick-flashing green light.





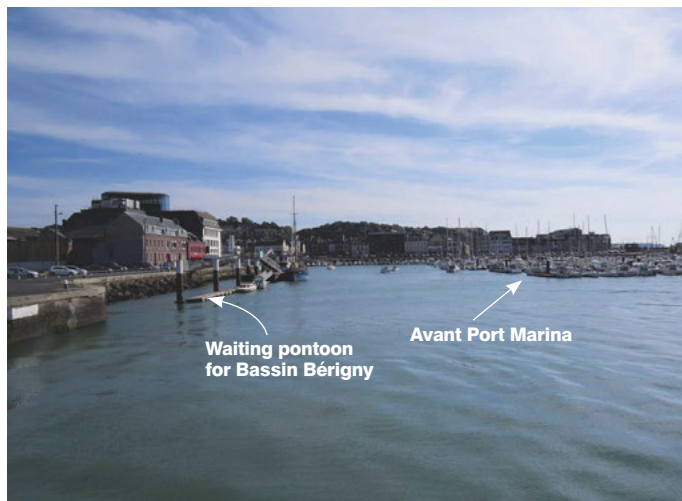
6 The first and only red light (Q.R) is located on the end of the first house further in along the western jetty, so be careful not to be drawn towards it. By day, a red disc can be seen. Line up this mark with the green on the eastern jetty to give a transit of 082°T. From this position, the western jetty creates a lee from the tidal set.



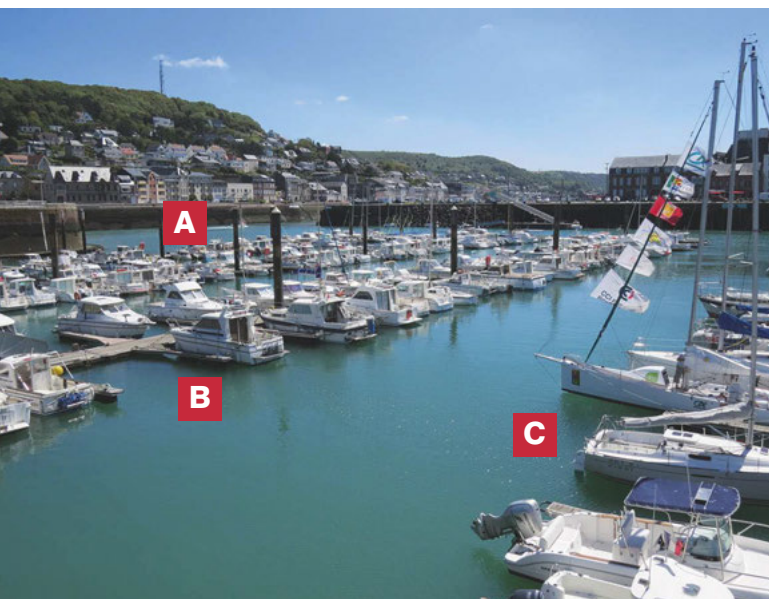
7 The recommended time of approach is HW-½hr. The entrance is claimed to be dredged to 1.5m, which explains how this local yacht can enter at half tide. Despite this, many yachtsmen claim to have touched the mud while attempting an entry at anything less than HW-½hr.



8 Follow the fairway inbound to the end of the eastern jetty. There are no specific shallow areas to avoid and the harbour should be dredged to 1.5m, bearing in mind the caveat mentioned in step 7.



9 At the entrance to the outer harbour, turn sharply to starboard. To port is the waiting pontoon for Bassin Bérigny, while the Avant Port Marina is to starboard.



10 Avant Port Marina has 510 berths in the outer harbour, of which 75 are allocated for visitors on pontoon C, the third pontoon in.



11 The fuel berth is located in the far corner of the outer harbour, beyond the lock gates for Bassin Bérigny. The unmanned fuel pumps are accessible 24/7 (diesel and petrol), and payment is by credit card at the pumps. Effluent pumps are self-service and free, allowing users to dispose of bilge water, toilet water and engine oils.



12 Beyond the waiting pontoon and before the fuel berth are the lock gates to Bassin Bérigny. Access to the 230-berth marina is two hours either side of HW. There are no visitors' berths inside, so it is unlikely that you would need to enter unless you required the services of the 20-tonne crane.



13 You may however negotiate a berth along the quay wall, which could prove enjoyable as it places you closer to the delightful restaurants found along the quays circling the Bassin Bérigny. A supermarket of modest size is located along Quai Bérigny, open seven days a week (half-day opening on Sundays).

Avant Port Marina capitainerie



Visitors to the Avant Port Marina will find the capitainerie at the top of the pontoon bridge. Opening hours are Monday to Friday from 0800 to 1200 and 1330 to 1700 off-season: longer (and variable) schedules are arranged during peak periods. The building also houses extensive sanitary and laundry facilities with 24-hour access on the ground floor: waste disposal facilities are located along the quay. Avant Port Marina and Bassin Bérigny are run by CCI Bolbec, which operates the entire port.

Contact details:

Bureau du port, Chaussée Levasseur, 76400 FÉCAMP

Tel: 00 33 (0)2 35 28 13 58

Email: plaisance@fecamp-bolbec.cci.fr

Web: www.fecamp-bolbec.cci.fr

VHF Ch9

Above the capitainerie is the Société des Régates de Fécamp, or SRF for short (Fécamp Yacht Club). The modern, friendly bar offers panoramic views out to sea, plus an interesting video weather station installation. During May, the SRF plays host to the annual Royal Escape Race from Brighton. www.royalescaperace.co.uk



14 It may be unlikely that visitors will need to venture further than the outer harbour or Bassin Bérigny. However, Fécamp does have a commercial area which extends beyond the swinging bridge at the end of the fairway. Access is via a locked basin, controlled by a traffic light system.

Never say die: The Sir Robin Knox-Johnston story

Peter K Poland talks to Sir Robin Knox-Johnston about competitive sailing, bringing new people to the sport and his dogged determination to succeed

When it comes to sailing, the French tend to bang their own drum and praise their own heroes. French sailors have been to the fore of long-distance single-handed racing from the day the young Eric Tabarlay and *Pen Duick II* won the OSTAR. Since then, they have not looked back. French sailors have dominated the specialist (some say loony) pastime of careering across oceans in ever more potent sailing machines. However, once in a while they make exceptions and praise Brits. Dame Ellen MacArthur and Sam Davies effectively became honorary French ladies because they trained as single-handers near the 'valley of the madmen' in Brittany then beat many French men at their own game.

And then there's Sir Robin Knox-Johnston. In January 2015 I received a French press release which, loosely translated, read as follows: 'He demanded respect when, at the age of 75, he lined up at the start of the 10th Route du Rhum – Destination Guadeloupe race. Sir Robin Knox-Johnston impressed even more when he mounted the podium in Guadeloupe, having finished third in the Rhum Class. At the beginning of this year, the man who in 1969 was the first to circumnavigate the world solo and non-stop was elected sailor of the year in London. A widely deserved reward that is added to three titles of Best British Sailor

already given in the past to this man who has been ennobled by the Queen. We doff our hat to you, Sir!'

The 2014 Route du Rhum is of course just the latest of the many and varied adventures that RKJ (Sir Robin Knox-Johnston) has embarked on over the last five decades. To understand his dogged determination to succeed, it helps to know that he's an Ulsterman and proud of it. RKJ asked me: 'Did you know that the Ulstermen were in the only brigade to make progress on the first day of the Somme? If there's something that needs doing, Ulstermen get in there, get on with it and do it. But if there's nothing important going on, Ulstermen are also the best at letting their hair down and having fun.'

This ability to stick to his guns when it's necessary – and have a party when it's not – helps explain how RKJ can brush problems aside and get on with the job.

Skills, tenacity and leadership

But to start at the beginning, RKJ was born in 1939 and went to school in Hertfordshire, where he enjoyed long-distance running, swimming and boxing. From an early age he took to 'solo' sports that demanded self-reliance, and while still at school, his love of the sea became apparent when he joined the Royal Naval Volunteer Reserve as a boy seaman.

Then he signed up with the British India (BI) company, joining their cadet ship *Chindwara*. 'It was a way of life that taught skills, tenacity and leadership. Modern merchant seamen are little more than lorry drivers carting piles of large boxes around the world. Real old-fashioned deep-sea skills have largely gone.'

The BI company started in Calcutta in 1856, sailing to and from the Indian sub-continent, then it ran cargo and passenger ships to East Africa. Its fleet included such famous names as *Dunera*, *Dilwara*, *Uganda*, *Kenya* and *Nevasa*. On



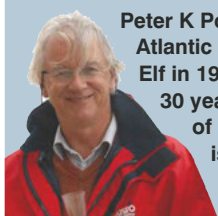
Bill Rowntree/PPL

the *Chindwara*, Knox-Johnston and his fellow apprentices received an excellent grounding in seamanship: by the time RKJ left her as a petty officer in 1959 he had many thousands of sea miles and a wealth of seamanship and experience under his belt.

There followed four years on the Bombay to Basra run, operated by the 'four Ds' – the *Dwarka*, *Dumra*, *Dara* and *Daressa*. His adventures began with a bang. '*Dara* was blown up in 1961 with the loss of 238 lives,' he said, 'and three months later we had a bomb explode on *Dwarka* when I was aboard, fortunately doing little damage.'

'Bombs were placed on the ships, it was thought, by terrorists involved in the insurrection in Muscat. I was only on one ship that had a bomb explosion: one was an own goal, with the bombers

ABOUT THE AUTHOR



Peter K Poland crossed the Atlantic in a 7.6m (25ft) Wind Elf in 1968 and later spent 30 years as co-owner of Hunter Boats. He is now a freelance journalist.



Clipper Ventures PLC

blowing themselves up. But when you are young, it's an adventure! I would probably take it a bit more seriously these days!' Hmm?

Shaping the future

RKJ then married, set up home in Bombay and joined the *Dumra* as third officer. At the same time, he had an idea that would shape his future. Together with another young officer, Peter Jordan, he planned a way of getting back to the UK. After considering then rejecting the idea of buying an old dhow to sail home then sell, they decided to buy some plans and build a little cruiser in India instead: 'A yacht which we could use for skin diving and underwater photography to pay our way home, and which we could sell at a profit when we reached England.'

The plans they bought turned out to be

for the wrong boat, and the rig drawings were extra. Still, she looked seaworthy and was better suited for a long ocean voyage than a slimmer, faster boat. So they designed a rig with the help of a couple of books: then large Indian teak logs started arriving at the Colaba Workshops' slip in 1963, where a team of Indian shipwrights got to work with adzes and bow drills to build the boat. And *Suhaili* (the name applied by Arab seamen to the south-east wind) took shape.

She was launched in 1964, and a third partner joined the 'syndicate': but delays meant they missed the north-east monsoon in early 1965 and then ran out of money. The two partners had to move on so RKJ got a loan, bought them out and laid up *Suhaili*. In his own words, he now had 'an unfinished, half-paid-for boat 10,000 miles from where I wanted

her to be and no crew to bring her home.'

This would be a blow for most people, but RKJ press-ganged his insurance broker brother Chris and a Marconi radio operator called Heinz and set sail a year later. Taking jobs en route to pay for ship's stores (which saw RKJ become the captain of a tramp coaster), they overcame small problems – such as a broken mast – and reeled off the final leg from Cape Town to Gravesend at a respectable 112 miles a day.

RKJ's determination to build *Suhaili* then sail her from India to England was impressive: but his next exploit went further. The Golden Globe Race offered a prize to the first person to sail single-handed and non-stop around the world. As RKJ wrote in the foreword of his book *A World of My Own*, 'these days, when people are thundering around the world





Both photos: Bill Rowntree/PPL

Between June 1968 and April 1969, RKJ's 32ft 5in cruiser *Suhaili* became the first boat to be sailed single-handed non-stop around the world

in purpose-built greyhounds in less than 100 days, it is hard to fully appreciate that it is only 45 years ago that we were not even sure a non-stop circumnavigation was possible.'

The differences between sailing in 1968 and now are enormous. Today sailors have GPS for instant positioning, EPIRBs to summon help, satellite communications to keep in touch with shore teams and sanity, electronic autopilots to hold a perfect course, roller furling headsails for safe and easy sail changes, watermakers and dehydrated food. The Golden Globe participants, on the other hand, were out of reach, out of contact, and – if they needed rescuing – probably out of luck. Solo meant solo. They were on their own in every sense of the word.

RKJ's Golden Globe voyage was amazing. While the 32ft 5in *Suhaili* was solid and sea-kindly, designed by William Atkins along the lines of the Colin Archer pilot boats, she was not fast. RKJ knew he'd be at sea for an age and would need all his seamanship and repair skills to keep *Suhaili* shipshape and sailing, but he had one advantage over today's world-girdlers. He says they 'suffer from the disadvantage that the spice of exploration is no longer there. Much of the sense of adventure has gone when a path has been explored.' He sums up the adventure by saying: 'There was something satisfying about being absolute master of your own fate,

knowing that if things went wrong there was no satellite phone to fall back on. Once you sailed, you were left entirely to your own devices.'

And RKJ's own devices were tested. Ten months alone at sea is enough to push anyone to their limits. He knew that his heavy and small *Suhaili* had little chance of beating the speedier yachts entered in the race: but, one by one, they fell by the wayside. Donald Crowhurst vanished into a world of personal fantasy and cruised around the Southern Atlantic before falling (or jumping) overboard – never to be seen again. The mystical Bernard Moitessier was three weeks behind RKJ at Cape Horn, but decided to go into oceanic orbit: and instead of turning left for home he carried straight on, finally fetching up in Tahiti. Atlantic rowers Chay Blyth and John Ridgway both retired when their respective craft failed, and Nigel Tetley's trimaran foundered when closing in on the finishing line.

'Distressingly normal'

Suhaili had her moments with mechanical, steering and structural problems. One example – when leaks developed along the hull planking – shows RKJ's 'never say die' attitude to life's little problems. The solution to the leaks, he decided, was to dive down and hammer caulking cotton into the gaping seams. He decided to sew the caulking cotton onto thin strips of canvas then

hammer these over the seams, securing them with tacks.

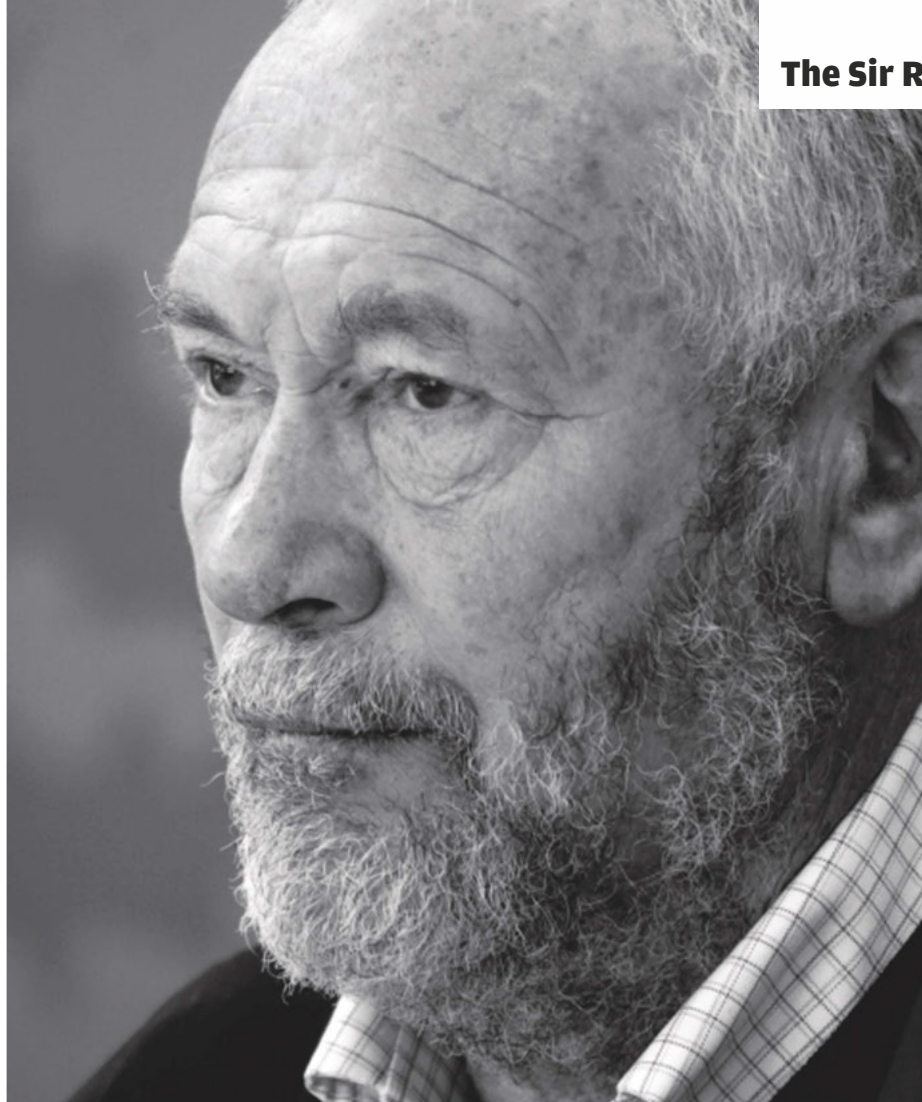
He was about to nail copper strips over the top to keep the whole thing in place when a large shark swam alongside. It lurked and watched, so he lured it to the surface (by lobbing loo paper over the side) and shot it between the eyes with the ship's rifle. Once it sank he went back into the water, hammered the copper strips in place and got on with the race.

Overcoming solitude, boredom and danger, RKJ's dogged determination won him the Golden Globe. A psychiatrist who interviewed him before and after the race declared his mental health to be 'distressingly normal.' His book, *A World of My Own*, is essential reading. If ever there was a saga of bulldog British spirit overcoming enormous odds, this is it.

Once back on terra firma, RKJ saw that things were changing in the merchant navy in general and in BI in particular – which had merged with P&O. Container ships and bulk carriers had changed the seafaring life previously enjoyed by 'old-fashioned' seamen.

He told me: 'The British ran half the world in the days when we produced mavericks. Now we seem to be run by jobsworths who interfere a lot and create little. Have all our entrepreneurs turned into bureaucrats?'

Having collected a CBE, a Yachtsman of the Year award and an RCC Seamanship medal, RKJ therefore sought new careers.



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RKJ: 'There was something satisfying about being absolute master of your own fate'

These were commercial (marinas), sailing (races, cruises and adventures) and good causes (STA and Sports Council). In the early '70s, he was involved in building Mercury Marina then ran Port Hamble Marina. 'How did that happen?' I asked. 'Because Ranks kept introducing new bosses and most hadn't a clue,' came his cryptic reply. Then he hitched up with Taylor Woodrow, helping build and run St Katherine yacht harbour beside Tower Bridge. He also rescued the steam tug *Challenge*, which had languished there as a rusting hulk. He persuaded Taylor Woodrow to sell her to the Dunkirk Little Ships Preservation Trust for £1, encouraging them to apply for Heritage Lottery money to restore her.

Line honours

Meanwhile, sailing was still important. RKJ teamed up with Les Williams RN (one of his favourite shipmates, along with Bernard Gallay, Billy King-Harman, Perry Crickmere and Peter Blake) to buy the first Van de Stadt-designed Ocean 71 hull.

With a basic and budget fit-out, *Ocean Spirit* entered the two-handed Round Britain Race in 1970. In those pre-headsail furler days, she was a massive monohull for two people to race. Many said it couldn't be done, but RKJ and Williams tamed *Ocean Spirit's* power and won the race by two days – the first (and last) time a monohull took line-honours in this demanding event.

Then they sailed *Ocean Spirit* south and entered the inaugural Cape Town to Rio race. Again, they won.

RKJ also turned his hand to Admiral's Cup racing, joining the winning crews on *Frigate* in 1973 and *Yeoman XX* in 1975. Then he noticed that large and fast new-generation catamarans looked a lot of fun. RKJ was never one to ignore a new challenge, so he and Gerry Boxall approached Rod Macalpine-Downie to design the 70ft *British Oxygen*. This monster pushed the catamaran concept to the limits. He was first home in the two-handed Round Britain Race (hitting 28 knots top speed) and later entered Round Britain races in 1978, '82, '86 and '90 in the catamarans *Sea Falcon* and *British Airways* and the monohulls *Great Britain II* (80ft) and Bob Fisher's *Howards' Way* star *Barracuda*.

RKJ also took another trip down to the Roaring Forties, teaming up with Les Williams and Peter Blake to compete in the Whitbread Round the World race in the 77ft *Condor*. Sadly their new-fangled carbon-fibre mast broke on the first leg, meaning that a 'win' was no longer possible. But *Condor* completed the course with a replacement spar and put in some fast times.

The 70ft *British Oxygen* pushed the catamaran concept to the limits

Meanwhile *Suhaili*, when not laid up, was used as a family cruiser until – in 1989 – RKJ took her to sea for another single-handed adventure. He decided to sail her from the Canaries to the Bahamas with no more than an Astrolabe (invented by ancient Greeks to take the height of the sun at noon) and a Dutchman's log (noting the time a piece of wood takes to travel the distance of the boat's length) to guide him.

After 3,000 miles at sea, he was out just eight miles in latitude and 22 miles in longitude. Called 'the Columbus Experiment', this jaunt won RKJ an honorary doctorate at the Maine Maritime Academy, the Royal Cruising Club Challenge Cup, Cruising World magazine's medal of honour and the Royal Institute of Navigation's gold medal for experiments with renaissance navigation. A lot of gongs.

The return trip was much more dramatic. *Suhaili* was knocked flat four times and dismasted in a violent mid-Atlantic storm. She reached the Azores under jury rig and sailed home the next year when new masts had been fitted.

Then RKJ teamed up with mountaineer Chris Bonnington to sail *Suhaili* north of the Arctic Circle and scale the highest virgin peak in Greenland. Unfortunately, on reaching the summit they noticed that a neighbouring peak was even higher. Even RKJ can't win them all.

A cheeky bid

However, his desire to break records was not diminished by this glitch. In 1992 he joined forces with Peter Blake to attempt to become the first to sail round the world in less than 80 days. They bought the catamaran *Tag*, renamed her *Enza* and set sail at around the same time as Frenchman Bruno Peyron in *Commodore Explorer*. They were neck and neck until, deep in the Southern Ocean, *Enza* careered into something solid in the sea, ripping a large hole in her starboard hull.

So they limped back to South Africa for repairs while Peyron completed the course, finishing just inside the 80-day target.

Whereupon RKJ and Blake got *Enza* back to the UK, refitted and lengthened her to 92ft then had a second go. *Enza* flew, remained intact and created a new record of 74 days. I was lucky enough to sail on this greyhound after her success and – in light airs – she lifted a hull and flew at 18 knots.

But not all RKJ's successes were afloat. While he was the STA's president he helped raise £11.5 million for two new 190ft brigs. 'We found the hulls in Germany,' he told me. 'They had been built as cruising ships, but the company went bust and the hulls were towed to



East Germany, and the receivers called in.

'We put in a cheeky bid for the pair of them, got the nod and towed them back to Hartlepool before anyone changed their minds.' (Who said the days of the buccaneers were over?) 'I was lucky to have an ally in fellow council member Giles Pritchett-Gordon. He organised the fitting out and introduced me to Niarchos, who became a major benefactor.'

At around the same time, RKJ was also on the Sports Council, having previously been involved in the Sports Lottery. 'I was on the council from 1999 to 2002. Trevor Brooking was our chairman, and he did a great job: £120 million was allocated to the new Wembley Stadium project, which was on a par with the new Sydney Stadium and Stade de France.

'But the Government kept changing its mind, which increased cost and added two years. I think it would have been finished on time and budget if the politicians hadn't interfered.'

And what about the Clipper Ventures round-the-world race for fare-paying amateurs? In his rousing chairman's foreword in an early brochure, RKJ wrote: 'It is human to dare... One of the core parts of this challenge is that it is not easy. But who is interested if you have done something that is easy? There is much greater satisfaction, and far greater respect, for the person who has achieved something that is really hard to do.'

When I asked him how Clipper was going now, he replied: 'We're currently refitting the 12 Castro-designed 70ft yachts for the next race, due to start from the UK South Coast at the end of August. Crew bookings are at 85%, slightly ahead of average. This will be the 10th Clipper Race, and this is our third fleet.'

When I enquired how the event had grown, he said: 'We started with eight 60-footers for the first four races, then had ten 68-footers, and now 12 70-footers.

The crews love them, and that's what matters.

'They are faster than previous Clipper yachts, especially off wind. The

crews are more international – 43 nationalities last time – and the number of ladies as a proportion has increased. In the last race there were 448 male and 230 female crew.

'We've had about 3,300 paying crew members in total: 40% have never been on a boat before, so we've introduced around 1,300 people to our sport.

'We have grown into a profitable company, but it would be fair to say that we emphasise customer satisfaction and that seems to result in a positive bottom line. We are always on the lookout for other possibilities because we have the team to do it.'



Matt Dickens/OnEdition

An eye-opener

Which brings us on to the Velux 5 Oceans round-the-world single-handed race (previously called the BOC, then the Around Alone) that is sailed in stages, has been managed by Clipper Ventures since 2000 and is sponsored by Velux. It came as no surprise that Clipper chairman RKJ decided to buy a second-hand IMOCA 60 and have a go in the 2006/07 race.

I was lucky enough to crew on this incredible beast on a Round the Island Race before RKJ plunged south and solo on the Velux, and what an eye-opener it was. The genoa was so heavy we had to winch it

from the pontoon onto the deck with a halyard. It took two crew several sweaty minutes to hoist the mainsail. Taming the massive furling headsails and spinnaker and controlling the running backstays took several people. The accommodation was effectively non-existent. Even in light winds, the speed was breathtaking: and one OAP was going to race this thing single-handed over 30,000 miles?

Of course he did, coming home fourth. Did you enjoy it, I asked? 'Loved it. Just hated the fact that the computer systems kept letting me down. Also, the autopilot was not fitted properly, which caused problems. The electric power wire was too small. It caused the boat to gybe and

smash all the battens before I even crossed the Equator on the way out.'

Three thousand, five hundred miles on the 2014 Route du Rhum – Destination Guadeloupe solo race aboard the same fearsome yacht should – by comparison with the Velux – have been a cakewalk. He took the first days cautiously as heavy storms lashed the Bay of Biscay and beyond, damaging many of the 91 entrants. Then RKJ and *Grey Power* got into their stride, reeling off the miles at an average speed of 9 knots and coming third in class. 'Congratulations,' I said. 'Should have been second,' he replied, having lost the wind when approaching the finish line. 'Did you have other problems?' I asked. 'None, except the masthead instrument senders failed: but I had a Windex. My generation considers masthead senders a luxury and can live without!'

'What about the next Route du Rhum race?' I then asked. 'A 60-footer is hard work,' he replied, 'so I think a 50-footer could be sailed more efficiently. I'll sell the 60 and get something a bit smaller and do more racing.' Then I impertinently asked if he had any other comments on sailing and the meaning of life at 75, and he replied: 'Keep thinking you are 48 or 49 and supposed retirement is great.'

At least he didn't say 42.

NEXT MONTH
The Hanse yachts story



Renovating a Fireball

Torie Morley and Toby Hamer realise a burning ambition to restore a Fireball – and reveal how *Skunk* earned her stripes



We first had the idea to sail a Fireball after attending a Meneham Rythe Sailing Club regatta in a Laser 2000. Seeing the Fireballs flying around us, we just knew we had to get in on the action – but we would have never thought that the following weekend we would be driving down to Cornwall to pick up an old wooden boat advertised for 'free' on the class website.

After a long, slow drive home we unloaded the boat: a few prods with a screwdriver showed that it was extremely rotten, with splitting seams and soft wood panels all around. Unfortunately, this meant that getting it watertight would have been impossible,

so we had to take a sledgehammer to it. However, the boat did come with a great top cover and a good set of spars, and we would also use the centreboard later in our project.

We didn't want to give up at the first hurdle, so we carried on looking for a good project boat, preferably in glassfibre. A week later Torie's dad, Andy, called us over to say he had got us a little present off eBay. Pulling into the drive, we were surprised to see *Little Orange*. The boat wasn't the nicest of colours: think 1970s bathroom orange and you won't be far off. She was very scratched and chipped, covered in a thick layer of grime and had not been afloat in over 20 years.



ABOVE Formerly *Little Orange*, this Fireball was destined to be reborn as *Skunk*

TOP RIGHT Toby finishes off the two-pack epoxy topcoat on the stern

The first step was cleaning *Little Orange* to see what we had to work on. Underneath the grime, we found many cracks and chips in the gelcoat: we used a Dremel to enlarge these before filling them with epoxy and car body filler. We spent days sanding down the whole hull, which was very painful on the hands, but at last the sanding stage was over and we'd got rid of most of the scratches.

Spongy areas

With the boat turned the right way up, we felt around the deck and noticed some spongy areas. Inside the tanks, we found lots of rotten foam core that needed replacing. After drying out all the tanks with heaters and making them watertight, we pulled out the rotten foam and reinforced the decks with glassfibre.

Little Orange didn't come with any foils, and being an older boat the newer centreboards didn't fit in the narrow case, so work started on making a centreboard of the relevant size. Andy built a jig out of scrap metal, and we sandwiched lengths of red cedar together and left them to set. We then cut out the correct shape using

ABOUT THE AUTHORS

Toby Hamer, 20, is a student at Chichester University. He has raced dinghies and is a sailing instructor. Torie Morley, 19, is studying at Brighton University and spends every summer bumbling around Emsworth Sailing Club with her dad, Andrew.



Toby and Torie receive their prizes at the 2014 Fireball nationals



a jigsaw and planed both sides of the board to give it its aerofoil shape. To make it strong enough to put up with us jumping on it to right the boat we covered it in carbon-Kevlar wrap and layers of epoxy, and let it set in an electric blanket for a few days. Carbon fibre is not normally allowed on a Fireball under the class rules, but this was the only material we could find which would give enough strength to the extremely narrow board. Using the warped centreboard from the rotten Fireball we shaped out a rudder blade, coating it in layers of epoxy while building a stock out of marine ply and mahogany.

Thwarted...

The boat came without thwarts, which caused issues: not only because there was nowhere for Toby to sit, but also because the sail number of Fireballs is usually written on the thwart. As the boat



ABOVE LEFT New plywood had to be inserted into the front tank

ABOVE RIGHT Red cedar was sandwiched and shaped into a centreboard



LEFT A rudder blade was carved out from the old warped Fireball centreboard then coated in layers of epoxy

BELOW The deck was painted, with a degree of difficulty, using sticky two-pack epoxy

also came without a measurement certificate we did not know her make, age or sail number! After discussions with the class association the boat was assigned sail number 7551, a number appropriate for the age of the boat which was not registered to any known vessel. (Many early Fireballs have rotted away to early graves, gone to the fishes or made excellent bonfires with no record of their destruction.) So, thwarts were cut, sanded and varnished to give an excellent feature to the finished boat, and engraved with our shiny new sail number.

It was then time to start covering up the '70s bathroom orange. We got hold of some grey and white car primer and sprayed that on the hull followed by the black and white topcoat, sanding it down with high-grade sandpaper between each layer to get a smooth feel. At this point, the name *Skunk* stuck!

Rigging the boat

For the decks we were given some unwanted two-pack epoxy paint. We had great difficulty painting it on due to the stickiness of the epoxy, but it gave a great finish to the decks and proved to be hard-wearing. When this dried we applied Pro-Grip thin foam rubber to the side decks to provide purchase for the crew while trapezing, tapering the edges to stop it from lifting. We cleaned up the spars using Vim, serviced all the pulleys and wires and re-riveted or bolted on the fittings where necessary. New sails were another present from Andy, and although they were measured in 1998 they were far crispier than the bed sheets from the original boat.

Rigging the boat was a challenging process as she came without any lines, and with many fittings missing it involved a lot of head scratching and trial and error for Toby. He used rigging diagrams found online, images of other classic Fireballs and pointers given by Fireball sailors who came to look at the boat.

Classic Fireballs used to use a jib track system mounted on the foredeck but this was phased out years ago, so we had to invent our own jib bar system which replicated the inbuilt modern system. Creating systems such as the jib bars,





The finished hull colour, with its distinctive 'skunk stripe'

kicker, spinnaker hoist and drop, pole uphaul, outhaul, Cunningham and centreboard setting lines all took days of puzzling and refinement as each rope had to run with minimal friction while working around the selection of cleats and blocks we had amassed from the two Fireballs. Luckily, a friend from work was scrapping an old International 14 and we were given the rights to whatever we wanted off the boat for a mere £50: so, armed with screwdrivers and spanners, we stripped it of all its nice Harken fittings!

We encountered a substantial problem when we tried tensioning the rig. Modern Fireballs run huge rig tensions to achieve the mast rake they require, but we found that we could barely get enough tension to measure without pulling the boat apart. This became apparent when fittings began ripping out of the deck! So we settled on a compromise: we set up the boat in a balance between achieving the maximum purchase possible while keeping all the fittings in strong areas of the hull, and not putting immense loads on any single fitting. It seemed to work – but time would tell...

Sailing or swimming?

Three days before the 2014 Fireball nationals, we took *Skunk* for her first sail. We had a great time, but needed to make a few alterations. The next day we took her for another sail but disaster struck when the mast step exploded, leading to a long and muddy walk when towing the boat back to the slipway.

We spent the whole of the next day with Andy fixing the step. Taking it apart, we found a mush of rotten wood. We ripped it all out and fixed in a large chunk of American oak, glassed it in, painted it and left it to dry overnight. The next day we attached the fittings, packed up the boat and headed to Tenby for the nationals.

Arriving in a boat park surrounded by shiny new boats which were all at least 40 years younger than *Skunk* was slightly intimidating, but we were warmly greeted by the class chairman who immediately arranged for someone to help us rig and tune our boat. The windy conditions meant we had running repairs throughout

the week: fixing loose pintles and shroud fittings, and adjusting systems and rigging. We couldn't race on one day due to the jib bow fitting ripping out. To fix this, Toby had to stitch-drill a new hatch into the bow to gain access to the fitting, and reinforce it with more screws and metal plates.

Tips on techniques

We had only sailed a Fireball twice before coming to the nationals, so learning on the job in windy conditions was interesting: we spent a fair amount of time practising our RYA capsized recoveries! Friendly class members in the boat park gave us tips on techniques, and we were even given a new boat, made by Winder, to sail on the lay day to see what it was like. (Don't tell *Skunk*, but we fell in love with it.) We had a great time all in all, and even left with a few prizes including second-placed Classic Fireball, novice helm (first), 'F**kwt' of the fleet and Miss Fireball 2014.

Later in the year we were proud to represent the Fireball class in the battle of the classes at Southampton Boat Show. As the only Fireball there, it was great to represent the class: we sparked a lot of interest and turned heads if nothing else.

We very much enjoyed renovating our Fireball and would recommend it to

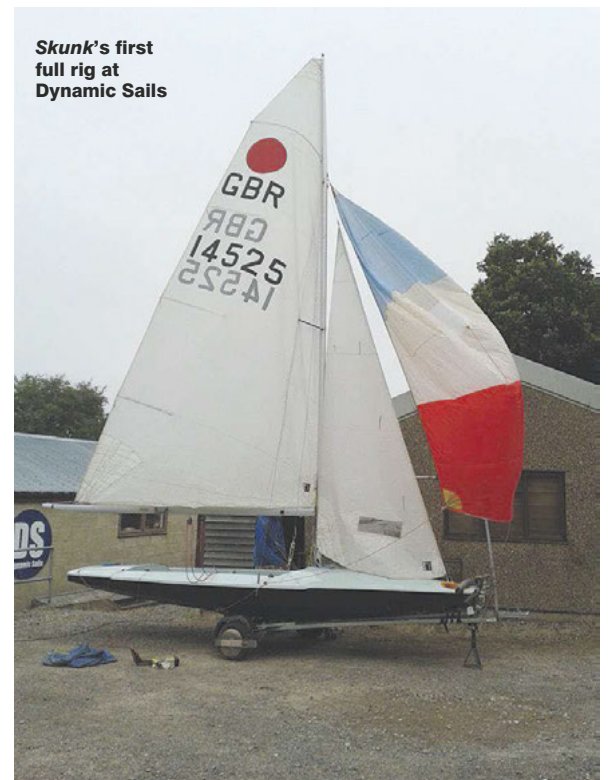


A front hatch was added to access and strengthen the jib fitting



anyone looking for a cheap way to get into Fireball sailing and learn more about boatbuilding. The class actively promotes classic boats racing in the circuit, and as we discovered, everyone is very willing to help you get a restored boat out on the water. Andy was a great help throughout the project, and he finally got to sail in a Fireball again after more than 25 years.

ABOVE The fittings and ropes were added after consulting rigging diagrams online and taking advice from fellow Fireball sailors



Skunk's first full rig at Dynamic Sails

Readers' cruising destinations, near and far

We pay for your published cruising stories and harbour updates. Email pbo@timeinc.com or write to the address at the top of page 5



The anchorage off Platerias



Mainland meandering in the Ionian Sea

Leaving the Gulf of Corinth behind them, Georgina and Tim Moon chose the Ionian Sea for their summer cruising ground

The Ionian is often associated with its beautiful islands such as Paxos, Corfu and Kefalonia, and it is easy to forget that the mainland bordering the Ionian Sea also offers a fascinating cruising experience.

As well as visiting the popular islands, we spent some time on *Fandancer* discovering some of the lesser-known locations on the mainland, from Sagiada in the north to Astakos further south. Astakos, the southernmost location on our mainland journey, is a fairly large Greek agricultural

town, located at the end of a large bay with a dramatic mountain backdrop. Although visiting yachts do come here, there was no sign of the flotillas that prefer the more popular parts of the Ionian. We met no other Brits, and there were no signs of the tourist souvenir shops popular elsewhere in Greece.

Astakos means 'lobster', although we saw no reference to any on taverna menus. However, the many seafood restaurants attract local visitors in July and August, who enjoy their evening 'volta' along the quay. The town contains some fine buildings and a popular beach with several unassuming seafront hotels. There is some room for visiting yachts to moor stern-to on the quay, but the water runs off deep, so a long anchor is required. Be careful not to take a fishing boat berth, or you may be chased off. Water is freely available outside the tavernas on the quay, and in the evening the road separating the tavernas and

the quay is closed to traffic.

North of Astakos, but also sitting under the slopes of the Arkanika mountains, is Paleros. Both times we visited here, there were amazing thunder and lightning displays even in high summer, due to the disturbed weather over the mountains. As water is freely available, and also electricity on the pontoon, the harbour becomes

crowded quickly. As well as being the base for a charter yacht company, several yachts seem to be moored here long-term.

Close to the harbour, the Yacht Cafe is a popular place to watch glorious sunsets from comfy beachside chairs. Another attraction for us were several tavernas that offered real Indian cuisine! After living aboard *Fandancer* in Greece for several months, the idea of chicken dopiaza, beef vindaloo, onion bhaji and vegetable samosa was too good to miss. We particularly liked the Panorama taverna, south of the harbour, with its real Indian chef.

On our journey through the Ionian we stopped briefly at

ABOUT THE AUTHOR



Georgina Moon and her husband Tim are currently sailing in the Ionian on their yacht

Fandancer, a Northstar 40.



A striking sunset over the lagoon in Sagiada

**Fandancer at anchor**

Preveza town and visited Ionian Marine, which would later be *Fandancer's* winter home. Our engine had suffered a fuel leak due to a faulty diesel filter, and Tim was able to replace the filter with the aid of new copper washers bought from the excellent chandlery at the boatyard. To avoid marina fees in Preveza we had a peaceful night at anchor, with the main town just a short dinghy ride away. We enjoyed exploring the old, narrow, paved streets just a step away from the bustling tavernas along the harbour front.

Turquoise sea

A beautiful place on the mainland for a lunch or overnight stop is at End Bay, Mourtos, providing there is not a fresh southerly wind. There are several places to anchor should the wind come from the south, or you could find a place on the town quay. End Bay is shallow, and the sandy bottom and turquoise sea provide a picturesque swimming location. We laid our anchor in just a couple of metres of water behind the sandbar and used a stern anchor to hold our position. Alternatively, you can take a long line ashore to the rocks. It is possible to walk into Mourtos from the anchorage,

although the road is steep.

Another place where we found anchoring to be an advantage was in the busy harbour at Platara. As several flotillas took up space on the quay, and the inner harbour was also full, we anchored in the middle of the harbour where there was plenty of swinging room for one yacht – although it is vital to drop the anchor in the right spot! When another yacht arrived to do the same, we took a rope back to the little quay to stop *Fandancer* ranging about. While all the yachts on the quay had an uncomfortable night due to some large swells, our anchorage was completely calm.

Hidden gem

Finally, in contrast to the bustle of some of the southern harbours is the small hamlet of Sagiada, in the north – a quiet harbour close to the Albanian border, east of Corfu, which is reasonably 'user-friendly' for yachts. The harbour provides excellent shelter. It has a narrow entrance and is shallow, as are the approaches. *Fandancer* has a draught of only 1.4m, but yachts with a deeper keel will need to take care. The harbour was largely empty when we arrived in July, apart from local fishing boats. This is a fairly isolated area with some well-signposted walking trails and sites of archaeological interest.

The main town of Sagiada, a short distance from the port, has a mini market, a bakery and a taverna. A backdrop of rugged mountains dominates the area and the place had an eerie feel, being so close to the Albanian border. However, threats of hostilities and incidents have largely disappeared, and Albania now has EU candidate status.

The land immediately behind the harbour of Sagiada is very low-lying, with several lagoons making the countryside green and fertile. A walk along the deserted beach revealed an abandoned spa centre where tourists once came to 'take the waters' as a cure for many ailments. A large sports and holiday complex further along the beach also lies deserted. We enjoyed our brief visit to the harbour: the local people were friendly and the taverna prices were considerably lower than on neighbouring Corfu.

Our mainland meanderings allowed us to see a different side to the Ionian. We would recommend this area of Greece to those who want to discover some new cruising destinations while remaining within reach of the more popular harbours.



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Eilean Munde, Scotland

**The anchorage off Eilean Munde looking north**

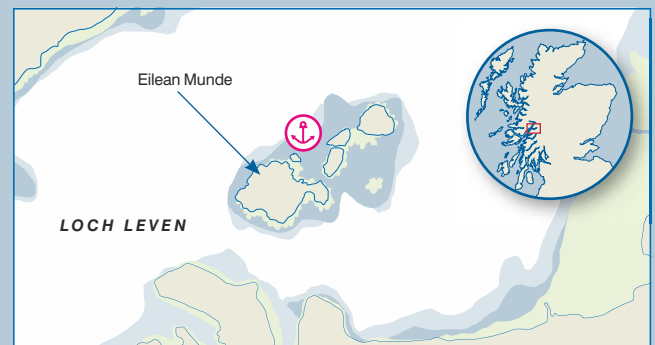
Eilean Munde is a small island in Loch Leven, close to Ballachulish.

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The website www.scottishanchorages.co.uk advises that a visit to Eilean Munde is an 'absolute must': not that there is a particularly safe overnight anchorage, but a stop is essential. Forget about the view of nearby buildings, ignore the noise from the road,

and just take in the mountains all around – and definitely land on the island.

Its name comes from St Mundus, an Irish disciple of St Columba. This atmospheric little island is a wonderful place from which to view Loch Leven: tombs lie scattered all around, mostly from the 19th century up to about the 1970s. There is a 16th century ruined chapel too, abandoned in 1653 and very overgrown. Sailors are among the few people who can access the island.



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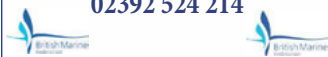
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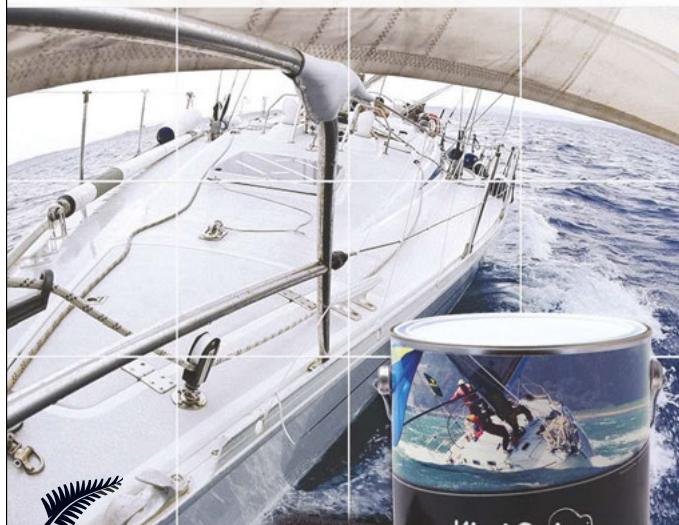
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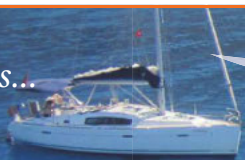


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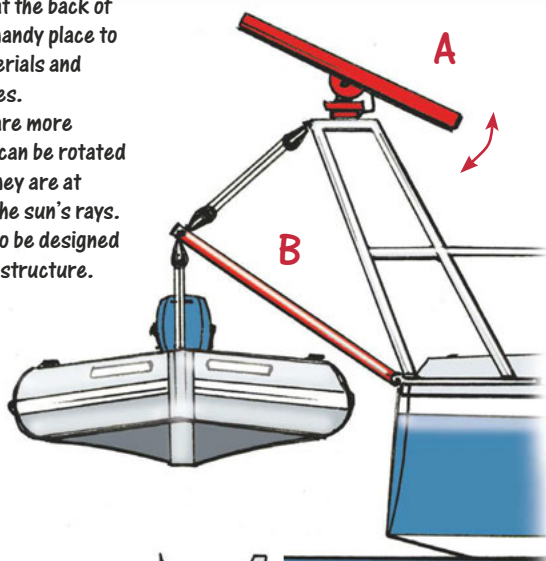
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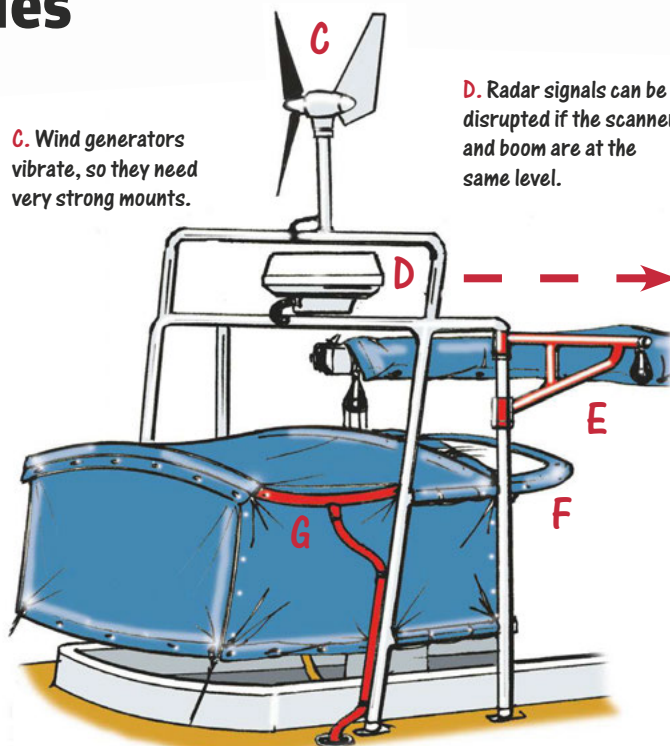
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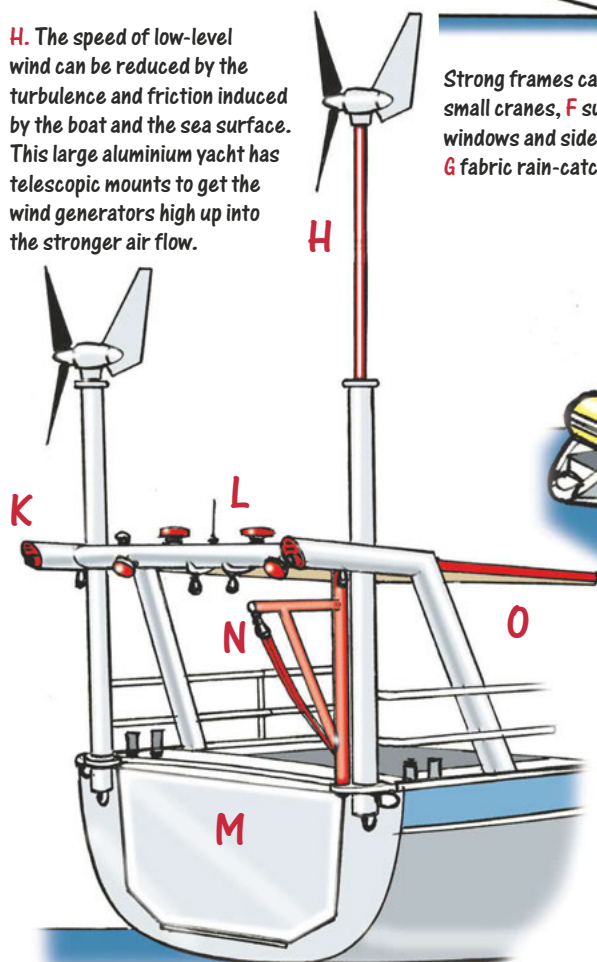
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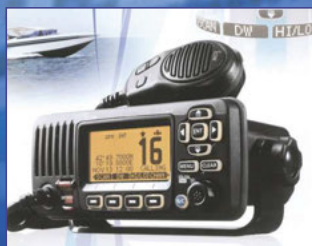
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